

Storm Data and Unusual Weather Phenomena

August 1994									
Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage	Crops	Character of Storm
					Killed	Injured	Property		
ALABAMA									
Lauderdale County Florence	01	0430CST			0	0	4	0	Lightning
Lee County 10 S Opelika	02	1725CST	2.6	300	0	0	4	0	Tornado (F0)
Thunderstorm wind and what appears to have been a small tornado caused structural damage and downed trees along Highway 51 in the Beauregard area about 8.5 miles south of Opelika. Several houses sustained some damage along with numerous uprooted trees. A car was damaged by flying tin from an out-building that was destroyed.									
Barbour County Eufaula	04	1500CST			0	0	4	0	Lightning
Lightning struck a tree under which six pregnant cows and a heifer were standing. All the cows were killed. Time of the actual event is estimated at 3:00 pm local time; actual time of the event is unknown except that it did occur in the afternoon.									
Baldwin County Loxley	05	1300CST			0	0	2	0	Thunderstorm Wind
Thunderstorm wind destroyed a metal shed and downed some tree limbs at Loxley in central Baldwin County.									
Winston County Haleyville	17	1950CST			0	1	3	0	Lightning
Lightning struck the city hall in Haleyville injuring a dispatcher who had just completed a radio transmission when the event occurred. The radio equipment and a generator sustained damage. The dispatcher was knocked about four feet from the radio equipment. He reported being disoriented with numbness in his shoulder and right arm. He was taken to a hospital for examination and released.									
Colbert County 2 SW Tuscumbia	18	1310CST			0	0	0	0	Hail (1.75)
Colbert County Emergency Management Agency reported hail up to golfball-size in the area just southwest of Tuscumbia.									
Cullman County 2 NW Hanceville	18	1329CST			0	0	4	0	Lightning
Lightning struck a house at Johnson's Crossing about 2 miles northwest of Hanceville. The lightning caused a fire that gutted the house and destroyed all of the family's possessions.									
Lawrence County 12 W Moulton	18	1330CST			0	0	0	0	Thunderstorm Wind
Lawrence County Emergency Management Agency reported a tree down across Highway 24 near Mount Hope in the west-central part of the county.									
Jackson County 3 NE Bridgeport	20	1438CST			0	0	4	0	Lightning
Four people were struck by lightning, two injured seriously, at a golf course in the Long Island Community about 3 miles northeast of Bridgeport. The people were taken by Life Force helicopter to Erlanger Hospital in Chattanooga. The four had been playing golf when it began raining, and they were standing under a tree at the number 5 green.									
Coffee County Enterprise	20	0600CST			0	0	4	0	Thunderstorm Wind
Strong wind ripped a substantial limb from a tree on Edwards Street in Enterprise early Monday morning according to newspaper reports. The limb fell on a late model car shattering the windshield and crushing the roof. Specific time entry is estimated.									

ALABAMA Cont'd

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Madison County 14 NW Huntsville

31 1515CST 0 0 0 0 Thunderstorm Wind

Thunderstorm wind reportedly downed tree limbs as large as a half foot in diameter in the area just north of Toney around 4:15 pm. Pea size hail was also reported about 30 minutes later at 4:47 pm along County Line Road by amateur radio storm spotters.

ARIZONA

Please refer to the second section of **Storm Data and Unusual Weather Phenomena**.

ARKANSAS

Please refer to the second section of **Storm Data and Unusual Weather Phenomena**.

CALIFORNIA, Northern

None reported.

CALIFORNIA, Southern

Riverside County Palm Springs

08 1200PST-1300PST ? ? ? ? Urban/Small Stream Flooding

Street flooding was reported in Palm Springs at Sunrise and Ramone St. Power outages in the area due to lightning. Additional heavy rain fell in the San Jacinto and Santa Rosa Mountains, where over an inch of rain fell during a 1/2 hour period.

Riverside County 3.0 NW Anza

09 1400PST-1500PST ? ? 5.0K ? Flash Flood

Riverside County Palm Springs

09 1315PST-1500PST ? ? ? ? Flash Flood

San Bernardino 5.0 W Phelan

09 1200PST-1400PST ? ? 3.0K 0 Flash Flood

San Bernardino 6.0 S Big Bear Lake

09 1500PST-1545PST ? ? ? ? Urban/Small Stream Flooding

Flooding with rocks and mud on highway 38. 1/2 to 1 inch of rain was reported.

Riverside County Valle Vista

12 1300PST-1330PST ? ? 0.50M ? Tornado (F0)

A tornado touched down causing tree to smash into the living room of a home in Valle Vista, just East of Hemet. Several other reports of funnel clouds around Hemet, with trees uprooted and utility poles blown over. A trailer was also destroyed.

San Bernardino Forest Falls

13 1400PST-1500PST ? ? ? ? Flash Flood

Riverside Hesperia

13 1240PST-1530PST ? ? ? ? Lightning

San Bernardino 5.0 N Lake Arrowhead

13 1300PST-1400PST ? ? 0.50M ? Lightning

Riverside County 5.0 NW Anza

13 1300PST 0.05M ? Urban/Small Stream Flooding

CALIFORNIA, Southern Cont'd

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					Killed	Injured	Property	Crops	
Street flooding reported in Palm Springs at Sunrise and Ramone St. Power outages in the area due to lightning. Additional heavy rain fell in the San Jacinto and Santa Rosa Mountains, with over an inch of rain in a 1/2 hour period.									
Riverside County 20.0 SE Borrego Springs	18	1600PST- 1645PST			?	?	?	?	Flash Flood
Flooding occurred on Highway 78 near the San Diego and Imperial county lines. Numerous reports of 1/2 inch hail was also noted.									
COLORADO									
Please refer to the second section of Storm Data and Unusual Weather Phenomena for additional information.									
Clear Creek County Idaho Springs	01	1415MST- 1445MST			0	0	50.0K	0	Flash Flood
Rocks and debris caused the closure of Virginia Canyon Road between Idaho Springs and Central City.									
Pueblo County Pueblo	01	1430MST- 1730MST			0	0	0	0	Flash Flooding
A thunderstorm containing heavy rain and small hail dropped over an inch of rain causing localized areas of flooding in Pueblo.									
Phillips County Haxtun (8NE)	01	1700MST	0.25	50	0	0	50.0K	0	Tornado (F0)
A tornado, which was estimated to be 50 feet wide and a quarter mile on the ground, passed through a feed lot with damage sustained to cattle buildings and feeders.									
Larimer County Estes Park (5S)	02	1100MST			0	3	0	0	Lightning
A vacationing family of three were struck by lightning while hiking in Rocky Mountain National Park.									
Larimer County Estes Park (5S)	02	1400MST			0	1	0	0	Lightning
A hiker was struck by lightning in Rocky Mountain National Park.									
Kiowa County Brandon	02	1445MST			0	0	0	0	Flooding
1.75 inches of rain fell in the town of Brandon with minor flooding of rural roads and along Highway 96 between the towns of Brandon and Sheridan Lake.									
Huerfano County Lathrop S.P.	03	1400MST			0	6	0	0	Lightning
Six people were in a car at Lathrop State Park when lightning struck the vehicle injuring all six.									
Park County Fairplay	04	1615MST			0	0	4.00K	0	Hail (0.50)
Hail accumulated 4 inches deep in and near Fairplay causing power failures and damage to power and communication equipment.									
Douglas County Larkspur (2E)	04	1632MST			0	0	0	0	Hail (0.75)

COLORADO Cont'd

EL Paso County

Storm Data and Unusual Weather Phenomena

August 1994									
Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
Ramah	04	1800MST			0	0	0	0	Hail (0.75)
Adams County Strausburg (1N)	05	1715MST			0	0	0	0	Hail (1.00)
Phillips County Amhurst	07	1845MST			0	0	0	0	Hail (2.00)
Sedgwick County Julesburg (15SSE)	08	1745MST	Short	Narrow	0	0	0	0	Tornado (F0)
A tornado made 2 brief touchdowns in an open field area.									
Weld County Stoneham	08	1750MST			0	0	0	0	Hail (0.88)
Bent County Las Animas (10W)	10	2050MST			0	0	0	0	Funnel Cloud
Jefferson County Lena Gulch	10	2100MST- 2115MST			0	0	50.0K	0	Flash Flood
Larimer County Livermore	10	2100MST- 2115MST			0	0	50.0K	0	Flash Flood
The road extending between Livermore and Red Feather Lakes was washed out or badly damaged at several locations.									
Larimer County LaPorte	10	2104MST			0	0	?	0	Hail (1.75)
Boulder County Lyons	10	2100MST- 2120MST			0	0	1.00M	0	Flash Flood Thunderstorm Winds
Larimer County Fort Collins (1N)	10	2122MST			0	0	0	0	Hail (1.00)
Fort Collins (CSU Foothills Campus)	10	2130MST			0	0	0	0	Thunderstorm Winds
Laporte	10	2130MST			0	0	400K	0	Hail (2.00)
A line of thunderstorms dropping heavy rain caused significant urban flooding and backed up sewer systems in Lyons. Numerous basements in Lyons were flooded out as well. The main road, extending between Livermore and Red Feather Lakes in Larimer County, was washed out at several locations. Rainfall amounts in upwards of 5.00 inches were reported in northern Larimer county near Virginia Dale.									
Jefferson County Westminster	10	2130MST			0	0	5.00K	0	Lightning
Lightning struck a house in Westminster causing a small attic fire.									
Jefferson County Arvada	11	0030MST			0	0	37.0K	0	Lightning
Lightning struck an Arvada house causing destruction to one third of the house.									
Indian Hills	11	1245MST			0	0	0	0	Hail (0.75)
Adams County Brighton	11	1522MST			0	0	0	0	Hail (1.00)

COLORADO Cont'd

Jefferson County

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Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
Westminster	11	1631MST			0	0	0	0	Hail (0.75)
Arvada (4NW)	11	1633MST			0	0	0	0	Funnel Cloud
Westminster	11	1636MST			0	0	0	0	Funnel Cloud
Westminster	11	1640MST			0	0	0	0	Hail (0.75)
Arvada (5NW)	11	1640MST			0	0	0	0	Thunderstorm Winds (G54)
Fremont County Canon City, Penrose	11	1640MST- 1730MST			0	0	?	0	Flash Flooding Lightning
Heavy rain fell in Canon City and Penrose during this period with reports of 2.25 inches of rainfall at those locations. In addition, lightning struck one home and numerous trees.									
Morgan County Brush	12	1630MST			0	0	2.00K	0	Thunderstorm Winds
Thunderstorm winds caused several 4-5 inch diameter trees to blow over. A motor boat was tossed off a trailer.									
Washington County Elba	12	1640MST	Short	Narrow	0	0	0	0	Tornado (F0)
A tornado briefly touched down in open land.									
Akron (13S)	12	1654MST			0	0	0	0	Hail (0.75)
Akron (16SSE)	12	1658MST			0	0	0	0	Hail (1.00)
Akron (25SE)	12	1706MST			0	0	0	0	Funnel Cloud
Weld County Wiggins	13	1247MST			0	0	0	0	Thunderstorm Winds
Thunderstorm winds downed small trees in the Wiggins area.									
Gilpin County Rollinsville	13	1330MST- 1337MST			0	0	0	0	Hail (0.25)
Hail covered ground 2-3 inches deep in and near Rollinsville.									
Central City	13	1345MST- 1445MST			0	0	1.50M	0	Flash Flood
A 100 year old opera house and several casinos were flooded out. 18 inches of silt and debris covered the main street of Central City after flood waters subsided.									
Pueblo County Pueblo	13	1415MST- 1515MST			0	1	1.00M	0	Hail (0.75) Flash Flood
Thunderstorms moving through the city of Pueblo dropped as much as 4.50 inches of rain along with 3/4 inch hail. City streets, highways, and underpasses were flooded and closed for a time. Several large trees were downed by thunderstorm winds of unknown speeds. A section of the Pueblo Mall collapsed injuring one person. Damage at the mall was estimated at \$350,000. Damage to the library where windows were broke, was estimated at \$30,000 to \$50,000. Total property damage in Pueblo was estimated to be near \$1 million.									
Weld County Greeley	13	1500MST- 1545MST			0	0	10.0K	0	Flash Flood

COLORADO Cont'd

Thunderstorms containing heavy rain and small hail caused basement flooding at locations close to a ditch.

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					Killed	Injured		
Larimer County Wellington	13	1445MST			0	2	0 0	Lightning
								Lightning struck 2 men who were fishing on a lake.
Bent County Las Animas	13	1842MST			0	0	? 0	Flash Flood
								1.31 inches of rain fell in 30 minutes flooding a few basements.
Weld County Nunn	16	1335MST			0	0	0 0	Microburst Winds (G54)
Hudson, Keensburg Fort Lupton	16	1400MST			0	0	450K 0	Microburst Winds
								Downburst winds caused the destruction of a couple of mobile homes while only a few lost their roofs. 20 downed poles caused widespread power outages in southern Weld County. Several small trees were uprooted with the passage of the microburst winds along with the destruction of two 115,000 volt Public Service towers.
Park County Bailey	17	1300MST			0	0	? 0	Lightning
								Lightning caused 10 acres of hillside trees and vegetation to burn before the fire was contained.
Fremont County Canon City (9S)	17	1500MST			0	0	0 0	Lightning
								Lightning started a grass fire near Canon City which burned for about two days.
Prowers County Wiley	18	1430MST			0	0	0 0	Thunderstorm Winds 60
Mesa County Grand Junction 10SSE	19	1700MST			0	0	5.00K 0	Flash Flood
								Heavy thunderstorms caused water and debris to cover 2 miles of Highway 141 for a couple of hours. This caused the closure of the road for a few hours for clean-up purposes.
Mesa County Loma	19	2030MST			0	0	50.0K 0	Flash Flood
								Locally heavy thunderstorms washed out part of Highway 139.
Larimer County Kings Canyon	22	1434MST			0	0	0 0	Thunderstorm Winds (G53)
Pueblo County Rye	24	1245MST			0	0	? 0	Lightning
								Lightning struck a water shut-off valve causing damage to the valve.
Boulder County Louisville	25	1540MST			0	0	? 0	Lightning
								Lightning blew out a power pole in Louisville. Power was out for 2 hours for many residents.
Baca County Springfield	31	0048MST			0	0	0 0	Flash Flooding
								Heavy rains at the rate of 1.25 inches per hour caused the flooding of highway 287 in and near Springfield.
CONNECTICUT								
Hartford County Wethersfield Glastonbury	13	1610EST			0	0	? 0	Thunderstorm Winds

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Tolland County									
Tolland									
	13	1630EST			0	0	?	0	Thunderstorm Winds
Many trees were reported blown down.									
Windham County									
Scotland									
	13	1705EST			0	0	?	0	Hail (0.75)
New London County									
Salem									
	13	1711EST			0	0	?	0	Thunderstorm Winds
State police reported numerous trees blown down.									
Litchfield County									
S Portion									
	21	1900EST- 2200EST			0	0	6	0	Flash Flood
New Haven County									
Southbury									
	21	1900EST- 2200EST			0	0	?	0	Flash Flood

Strong thunderstorms accompanied a cold front into Connecticut from New York state and torrential rains dropped from 1 to 5 inches of rain in a 3 hour period. Soil conditions already were well saturated as a result of 3 to 5 inches of rainfall during the preceding 10 days. While the heavy rainfall occurred mostly during the late afternoon and early evening, flooding of small streams continued into the early hours of August 22nd.

Tremendous damage occurred to road systems and bridges as a result of runoff from small streams. The two towns with the greatest amount of damage were Washington and New Milford in Litchfield County, with a combined total of \$1.1 million. Damage in the adjoining towns of Bethlehem, Woodbury, Roxbury, and Watertown accounted for the remainder of the final total damage of \$1.3 million. In Bethlehem, two bridges were washed out and about 40 miles of town roads were damaged, including 6 miles that were severely damaged. Many residents reported basement flooding in the affected areas, but there was no significant damage to buildings or utilities. A couple of families were evacuated from their homes in Woodbury. In the northwest corner of New Haven County, a state of emergency was declared in Southbury due to flooding along the Pomperaug River. Some roads were closed, but only minor damage was reported.

DELAWARE

Sussex County									
Millsboro									
	05	1523EST			0	0	1	?	Hail (0.75)
Dime-sized hail fell east of Millsboro on Route 24. The hail was reported by Delaware Emergency Management Agency.									

FLORIDA

Monroe County									
Plantation Key									
55 ENE MTH									
	01	0705EST			0	0	0	0	Waterspout
A waterspout was reported by sheriff's department just south of Plantation Key.									
Hendry County									
Felda									
23 E FMY									
	01	1300EST			0	0	2	0	Funnel Cloud
Local authorities sighted two funnel clouds near Felda.									
Lee County									
Cape Coral									
5WNW FMY									
	01	1415EST			0	0	2	0	Thunderstorm Winds
Wind damage caused power outages.									

FLORIDA Cont'd

Lee County									
Boca Grande									
23WNW FMY									
	01	1427EST			0	0	0	0	Funnel Cloud

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A funnel cloud was sighted by the public near Boca Grande Pass.									
Citrus County Homosassa 49N TPA	01	1545EST			0	0	0	0	Funnel Cloud
A citizen reported a funnel cloud in Homosassa.									
Sarasota County Warm Mineral Spgs 28SE SRQ	01	1602EST			0	0	0	0	Thunderstorm Winds
A tree was blown down near Warm Mineral Springs.									
Sarasota County Gulf Gate 13SSE SRQ	01	1604EST			0	0	3	0	Thunderstorm Winds
Two trees and power lines were blown down and two houses had windows broken in Gulf Gate.									
Pasco County 25N TPA	01	1754EST	Short	?	0	0	3	0	Tornado (F0)
					0	0	3	0	Lightning
A tornado briefly touched down three miles east of U.S. 19 on SR 52 in the Shadow Run subdivision knocking down phone and power lines. Lightning damaged a house in the same area.									
Hernando County Weeki-Wachee Spgs 40N TPA Spring Hill 35N TPA	01	1825EST			0	0	0	0	Thunderstorm Winds
					0	0	4	0	Lightning
Trees were downed in the Weeki-Wachee and Spring Hill areas. Lightning struck and damaged a hospital and school.									
Hernando County Brooksville 35NNE TPA	01	1830EST	Short	?	0	0	3	0	Tornado (F0)
A brief tornado removed the roof from a house northeast of Brooksville.									
Pinellas County Dunedin 13W TPA	01	1900EST			0	0	0	0	Funnel Cloud
A funnel cloud was sighted west of Dunedin.									
Marion County Summerfield 41SSE GNV	01	1854EST			0	2	4	0	Thunderstorm Winds
Thunderstorm winds blew down power lines and large trees. One tree fell onto a car injuring two of its four occupants. The roof of a house in Summerfield was peeled off.									
Marion County E Ocala 32SSE GNV	01	1953EST			0	0	0	0	Thunderstorm Winds
Thunderstorm winds blew numerous trees down closing Highway 40 east of Ocala.									
Manatee County Bradenton 29S TPA	02	1604EST			0	0	2	0	Thunderstorm Winds
					0	0	3	0	Lightning
Phone and power lines were downed in Bradenton by thunderstorm winds. Lightning struck and damaged two houses.									
Sarasota County Venice 43NW FMY	02	1643EST			0	0	2	0	Thunderstorm Winds
Thunderstorm winds blew down power lines.									
FLORIDA Cont'd									
Pasco County Hudson 225NNW TPA	03	1610EST			0	0	2	0	Thunderstorm Winds
A tin roof was torn off of a barn northeast of Hudson.									

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St Lucie County 4E Ft Pierce 18SE VRB	04	1020EST			0	0	0	0	Waterspout
			A waterspout was reported 4 miles east of Ft. Pierce.						
Dixie County Suwanee 50WSW GNV	04	1809EST			0	0	2	0	Thunderstorm Winds
			A tree was blown down bringing down power lines.						
Monroe County 8NW EYW	05	1440EST			0	0	0	0	Waterspout
			A waterspout was observed 8 miles northwest of Key West International Airport.						
Monroe County 5NE EYW	05	1155EST			0	0	0	0	Waterspout
			A waterspout was observed 5 miles northeast of Key West International Airport.						
Broward County Coral Springs 12NNW FLL	05	1500EST			0	0	0	0	Funnel Cloud
			A funnel cloud was sighted near Coral Springs.						
Osceola County Kissimmee 42WNW MLB	06	1325EST			0	0	0	0	Hail (1.00)
			Quarter-size hail fell in Kissimmee.						
Brevard County Satellite Beach 4NNE MLB	06	1600EST			1	2	0	0	Lightning
			A 37-year-old male dentist was killed and his wife and daughter injured by lightning while lounging on the sand at Satellite Beach. (M37O)						
Marion County Silver Springs 30SSE GNV	06	1732EST	Short	?	0	0	4	0	Tornado (F0)
			A tornado travelled about 200 feet snapping off power poles and tearing part of a roof off of a mobile home and slightly damaging two other mobile homes.						
Marion County Clermont 52SW DAB	06	1745EST			0	0	0	0	Thunderstorm Winds
			A large oak tree was toppled by thunderstorm winds.						
Broward County Ft Lauderdale	07	0730EST			0	0	0	0	Funnel Cloud
			Several funnel clouds were reported northeast of Ft Lauderdale.						
Lafayette County Mayo 44S VLD	07	1700EST			0	0	4	0	Urban Flooding
			Eight and one half inches of rain fell in three hours and caused flooding that did minor damage to houses and businesses in Mayo.						
Broward County Coral Springs 12NNW FLL	07	1800EST			0	0	3	0	Thunderstorm Winds
Oakland Park 5N FLL	07	1805EST			0	0	0	0	Hail (0.75)
FLORIDA Cont'd									
Ft Lauderdale	07	1815EST			0	0	3	0	Thunderstorm Winds (G50)
					0	0	4	0	Lightning
			Severe thunderstorm winds downed trees and power lines and spawned a funnel cloud in Coral Springs. A SKYWARN observer reported 3/4" hail in Oakland Park. Wind gust of 58 mph were						

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								measured at Ft Lauderdale International Airport and lightning strikes damaged two planes and the runway.	
Lake County Tavares 41WSW DAB	08	1430EST			0	1	00	Lightning	
								A Lake County deputy sheriff was slammed to the ground while walking in a yard. The lightning struck a house then hit the yard about a foot behind the woman.	
Monroe County 15NE EYW	09	1255EST			0	0	00	Waterspout	
								A waterspout was observed 15 miles northeast of Key West International Airport.	
Citrus County 52SSW GNV	09	1632EST			0	0	00	Waterspout	
								A large waterspout was reported 1 mile west of the Crystal River Nuclear Power Plant.	
Charlotte County Englewood Beach 35NW FMY	10 10	1417EST 1430EST	Short	?	0 0	0 0	2 3	0 0	Tornado (F0) Thunderstorm Winds
								A severe thunderstorm in Englewood Beach produced a brief tornado that tore down power lines . Straight line winds tore the roof off of a mobile home.	
Sarasota County 38NW FMY	10	1430EST			0	0	00	Hail (1.75)	
								Golf ball-size hail reported on I-75 near the Charlotte County line.	
Hillsborough County Temple Terrace 9ENE TPA	10	1430EST			0	0	40	Lightning	
								Lightning damaged a nursing home in north Tampa. A water treatment plant in Temple Terrace suffered \$30,000 damage from a lightning strike.	
Charlotte County Englewood 35NW FMY	10	1445EST			0	0	30	Thunderstorm Winds	
								Barricades on a drawbridge near Englewood were damaged.	
Pinellas County Clearwater 14W TPA	10	14359ES			0	1	00	Lightning	
								A 27-year-old male suffered numbness in his legs after a nearby lightning strike.	
Manatee County Sarasota	10	1527EST			0	0	20	Thunderstorm Winds	
								Power lines were downed near the Sarasota County line.	
Sarasota County 5E SRQ	10	1546EST			0	0	00	Thunderstorm Winds	
								A tree was blown over.	
Hillsborough County Tampa	10	1623EST			0	0	00	Funnel Cloud	
								SKYWARN spotter reported a funnel cloud in Tampa.	
Hillsborough County Plant City 22E TPA	10	1623EST			0	0	00	Thunderstorm Winds	
								Trees were downed in Plant City.	
Sarasota County Sarasota	10	1623EST			0	0	50	Urban Flooding	
								Heavy rain caused urban street flooding in several areas of Sarasota with water up to the windows of cars.	
FLORIDA Cont'd									
Hillsborough County N Portion	10	1642EST			0	0	00	Thunderstorm Winds	
								Several trees were blown down causing scattered power outages.	
Pasco County	10	1710EST			0	0	00	Funnel Cloud	

Storm Data and Unusual Weather Phenomena

August 1994									
Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
Hudson									
			Several people in Hudson sighted a funnel cloud.						
Volusia County Dayton Bch Shores 2ENE DAB	10	1840EST			0	0	0	0	Waterspout
			Three large waterspouts were reported over the Atlantic just east of Daytona Beach Shores.						
Lake County Umatilla 35WSW DAB	11	1500EST			0	0	2	0	Thunderstorm Winds
			Trees and power lines were blown down around Umatilla.						
Dade and Broward Counties	11	2000EST-							
	12	2000EST			0	0	4	0	Urban Flooding
			A record 9.18 inches of rain fell at Miami International Airport causing urban flooding across Dade and Broward County.						
Jefferson County Monticello 16NE TLH	12	1400EST			0	1	0	0	Lightning
			A woman standing in her yard under a tree was injured by a lightning strike.						
Desoto County Arcadia 36N FMY	13	1500EST			0	0	3	0	Lightning
			A lightning strike shattered a brick chimney on a Family Service Center in Acadia, and started a small fire that caused \$3,500 damage.						
Dade County South Miami 6S MIA	14	0200EST	Short	?	0	0	0	0	Tornado (F0)
			A brief tornado touched down in South Miami but caused no casualties or damage.						
Lee County Cape Coral 5NNW FMY	14	1000EST			0	0	4	0	High Wind
			The fringes of soon-to-be Tropical Storm Beryl did minor damage to businesses in Cape Coral.						
Putnam County Interlachen 19E GNV	15	1400EST			0	0	3	0	Lightning
			A lightning initiated fire completely destroyed a mobile home worth \$5,000.						
Volusia County Ormond Beach 6N DAB	15	1415EST			0	0	0	0	Waterspout
			A waterspout was reported off of Ormond Beach.						
Manatee County Palmetto 27S TPA	15	1500EST			0	0	3	0	Thunderstorm Winds
			Trees were downed damaging two cars.						
FLZ010>021- 026>029- 034>035-039	15	2000EST-							
	16	0800EST			0	1	7	?	Tropical Storm Beryl
			Tropical Storm Beryl formed in the northeast Gulf of Mexico and moved slowly east northeast, crossing the Florida panhandle coastline near Panama City at 8 PM EST, July 15. At landfall the minimum central pressure was 1000 mb and the maximum sustained wind was estimated at 58 mph. The maximum reported storm tide of 2.9 feet and the greatest rainfall total of 10.69 inches were observed at Apalachicola, but somewhat higher values likely occurred to the east of this location. Beryl weakened to a tropical depression as it moved northeast into extreme southwest Georgia at 8 AM EST, July 16. There were no deaths and only 1 injury directly attributable to Beryl and damage was estimated at \$5.9 million. Coastal damage included tidal flooding which undermined a few roads and houses and eroded beaches and sea walls. A number of moored boats were damaged and three persons on a fishing boat offshore the panhandle had to be rescued. Winds did minor roof damage and downed trees and signs along the coast. Inland, trees were blown down damaging roofs						
FLORIDA Cont'd									
			and power was lost to 20,000 customers. The heavy rain caused flooding of low lying areas which lasted more than a week, damaging houses and vehicles. The oyster beds in Apalachicola Bay were once again contaminated.						
Okaloosa County	16	1400EST			1	0	0	0	Rip Current

Storm Data and Unusual Weather Phenomena

August 1994

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
Destin Beach 25S CEW									A 41-year-old male tourist drowned in a rip current at Miramar Beach near Destin while saving his 13-year-old daughter. The rip current was caused by swells and strong onshore winds in the wake of Tropical Storm Beryl. (M41O)
Brevard County Kennedy Space Cntr 28NNE MLB	16	1530EST 1545EST			0	0	0	0	Thunderstorm Winds (G52) Thunderstorm Winds (G63)
									Gusts to 52 and 63 knots from severe thunderstorms were measured at Kennedy Space Center.
Franklin County St George Is 45SW TLH	16	1655EST	Short	?	0	0	0	0	Waterspout- Tornado (F0)
									A waterspout moved onshore St. George Island but caused no casualties or damage.
Bay County Panama City Bch 6WSW PAM	17	1626EST			1	0	0	0	Rip Current
									A 45-year-old male tourist drowned in a rip current at Panama City Beach behind the Holiday Inn at 11127 Front Beach Road. The rip current was caused by swells and strong onshore winds in the wake of Tropical Storm Beryl. (M45O)
Sumter County Bushnell 47NNE TPA	18	1305EST			0	1	0	0	Lightning
									A 26-year-old male prison guard was injured while working outdoors at the Sumter Correctional Institute. Rain had just begun falling and the first lightning strike observed hit a fence and ricocheted 15 to 20 feet into the guard knocking him down.
Pasco County Zephyrhills 24NE TPA	18	1630EST			0	0	2	0	Thunderstorm Winds
									Numerous power lines were downed between Zephyrhills and Crystal Springs.
Hillsborough County E central	18	1700EST			0	0	2	0	Thunderstorm Winds
									Roof shingles were blown off of a home in the east central part of Hillsborough County.
Desoto County Arcadia 38N FMY	18	1730EST			0	0	2	0	Thunderstorm Winds
									Power lines were blown down from north of Arcadia to several miles south of Zolfo.
Hillsborough County Lithia 25SE TPA	19	1730EST			0	0	0	0	Hail (0.88)
									Nickel-size hail was reported in the vicinity of SR 39 and CR 640.
Marion County Anthony 5N OCF	19	1730EST			0	0	0	0	Thunderstorm Winds
									Sheriff's office reported severe thunderstorm winds blew down trees.
Hillsborough County Pinecrest 1N TPA	19	1745EST			0	0	2	0	Thunderstorm Winds
									Power lines were downed between Pinecrest and Keyville.
St Johns County Orangedale 13SSE NIP	19	1755EST			0	0	4	0	Lightning
									Lightning initiated fires caused damage in the Orangedale area.
Clay County St Johns County	19	1855EST			0	0	0	0	Thunderstorm Winds
									Numerous reports of large trees uprooted.
FLORIDA Cont'd									
Polk County Mulberry 29E TPA	19	1930EST			0	0	2	0	Thunderstorm Winds
									Power lines were blown down in Mulberry.
Polk County Fort Meade	19	2000EST			0	0	2	0	Thunderstorm Winds

Storm Data and Unusual Weather Phenomena

August 1994									
Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
40ESE TPA									Power and phone lines were blown down in Fort Meade.
Hernando County	20	1430EST			0	0	0	0	Hail (0.75)
Brooksville					0	0	4	0	Thunderstorm Winds
35NNE TPA									Severe thunderstorms produced dime-size hail and wind gusts that damaged a house roof, and blew down power lines and large tree limbs in Brooksville.
Polk County	20	1748EST			0	0	0	0	Funnel Cloud
Lake Hamilton									A funnel cloud was reported in Lake Hamilton.
40E TPA									
Pasco County	21	1700EST			0	0	0	0	Thunderstorm Winds
Zephyrhills									Trees were blown down between Zephyrhills and Crystal Springs.
24NE TPA									
Orange County	21	1745EST			0	0	0	0	Hail (0.75)
5S Christmas									
28NW MLB	21	1803EST			0	0	0	0	Hail (0.75)
Ocoee									Dime-size hail fell at the toll booth on U.S. Hy 528 5 miles south of Christmas and in Ocoee.
44SW DAB									
Highlands County	21	1830EST			0	0	2	0	Thunderstorm Winds
Sebring									Thunderstorm winds blew down power poles between Sebring and Avon Park.
55W VRB									
Volusia County	21	1900EST			0	0	0	0	Thunderstorm Winds
Edgewater									Hail (0.75)
14SE DAB									Trees were blown down and dime size hail fell in Edgewater.
Martin County	22	1220EST			0	0	0	0	Waterspout
St. Lucie Inlet									A waterspout was reported a few miles east of St. Lucie Inlet.
33NNW PBI									
St. Lucie County	22	1630EST			0	0	0	0	Thunderstorm Winds
Ft. Pierce									Thunderstorm winds blew down trees in the Ft. Pierce area.
12SSE VRB									
Broward County	23	1525EST			0	0	0	0	Thunderstorm Winds (G52)
Coral Springs		1541EST			0	0	0	0	Thunderstorm Winds (G60)
12nnw FLL	23	1550EST			0	0	0	0	Hail (0.88)
Miramar									Severe thunderstorms produced wind gusts of 60 to 70 mph which blew down trees in Coral Springs. Nickel-size hail and wind gust of 70 mph were reported by a SKYWARN spotter in Miramar.
5NW MIA									
Dade County	23	1610EST			0	0	0	0	Thunderstorm Winds (G50)
N part									Thunderstorm wind gusts estimated at 58 mph blew trees down in north Dade.
10N MIA									
Polk County	23	1630EST			0	1	0	0	Lightning
Lake Wales									A man was struck and injured by lightning near Lake Wales.
50E TPA									
Franklin County	24	0615EST			0	0	0	0	Waterspout
Carrabelle									A waterspout moved between Dog Island and Carrabelle.
35SSW TLH									
FLORIDA Cont'd									
Osceola County	24	1530EST			0	2	0	0	Lightning
St. Cloud									Two male construction workers, one 22 and another 23, were hospitalized after being struck by lightning at a work site in St. Cloud. Both were standing in an open window in a roofless apartment building.
35WNW MLB									
Polk County	24	1530EST			0	0	2	0	Thunderstorm Winds

Storm Data and Unusual Weather Phenomena

August 1994

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage Property - Crops	Character of Storm
Polk City 39ENE TPA								Power lines were blown down in Polk City.
Hillsborough County Riverview 12ESE TPA Ruskin 16 SSE TPA	24	1640EST			0	0	0	Thunderstorm Winds
								Tree was blown down across Simms Road in Riverview and a tree was blown over on 21 Ave in Ruskin.
Dade County 22S MIA	25	0725EST			0	0	0	Waterspout
								A waterspout was reported in south Biscayne Bay near Turkey Point Nuclear Power Plant.
Martin County Hutchinson Is 30SSE VRB	25	1730EST			1	0	0	Rip Current
								Three local males were caught in a rip current behind the "House of Refuge". One male drowned and the other two escaped serious injury when strong onshore winds created the rip currents. M150.
Lee County Bonita Springs 15SSE FMY	25	1525EST			0	0	4	Lightning
								Lightning struck a power line and travelled into a house causing a fire that totally destroyed the \$50,000 dwelling. Several people in the house were treated for smoke inhalation.
Dade County 9ESE MIA	26	1210EST			0	0	0	Waterspout
								A waterspout was observed at the mouth of the Government Cut ship channel in central Biscayne Bay.
Lee County N Ft. Myers	26	1645EST			0	0	2	Thunderstorm Winds
								An awning at a service station was damaged by thunderstorm winds.
Lee County 20W FMY	26	1720EST- 1730EST	2.0	25	0	0	0	Waterspout Tornado (F0)
								A waterspout travelled west across San Carols Bay and came ashore on Pine Island at St. James City. The tornado lifted and continued west as a funnel cloud to Pine Island Sound.
Duval County Jacksonville Bch 15E NIP	27	1600EST			1	1	0	Rip Current
								A 29-year-old male Georgia tourist drowned in a rip current while swimming at Jacksonville Beach. A male companion was hospitalized after nearly drowning in the same rip current. (M290)
Monroe County Conch Key 18E MTH	27	1707EST			0	0	0	Waterspout
								A waterspout was reported by Monroe County Emergency Management 3 miles southeast of Conch Key.
Levy County Bronson 24SW GNV	27	1805EST			0	0	0	Thunderstorm Winds Hail (1.75)
								Trees were downed, and golf ball-size hail fell south of Bronson.
Monroe County Conch Key 18E MTH FLORIDA Cont'd	28	1025EST			0	0	0	Waterspout
								A waterspout was reported by Monroe County Emergency Management 3 miles southeast of Conch Key.
Hillsborough County Sydney 17E TPA	28	1558EST			0	0	0	Thunderstorm Winds
								Nickel-size hail was reported in Sydney.
Monroe County	29	1105EST			0	0	0	Waterspout

Storm Data and Unusual Weather Phenomena

August 1994

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
Summerland Key 30E EYW									A waterspout was reported by the public 5 miles south of Summerland Key.
Palm Beach County Boca Raton 17NNE FLL	29	1441EST			0	0	0	0	Funnel Cloud
									Two funnel clouds were sighted over Boca Raton.
Broward County Coral Springs 12NNW FLL N Lauderdale 10NW FLL	29	1435EST	Short	?	0	0	0	0	Tornado (F0)
	29	1440EST	Short	?	0	0	0	0	Tornado (F0)
									Funnel clouds touched down briefly in two separate locations causing no casualties or damage.
Monroe County 5NW EYW	30	1350EST			0	0	0	0	Waterspout
									A waterspout was observed 5 miles northeast of Key West International Airport.
Monroe County 5NNE EYW	31	0642EST			0	0	0	0	Waterspout
									A waterspout was observed 5 miles north northeast of Key West International Airport.
GEORGIA									
									Please refer to the second section of Storm Data and Unusual Weather Phenomena for additional information.
Putnam County 8 SE Eatonton	03	1335EST			0	0	3	0	Thunderstorm Wind
									Thunderstorm winds blew off a tin roof from a barn at a dairy farm which downed power lines and caused power outages across the county for a couple of hours. Several large trees were also downed across the county by thunderstorm winds.
Heard County 3 W Franklin	03	1438EST			0	0	2	0	Thunderstorm Wind
									Several large trees were blown down across Georgia Highway 34 by thunderstorm winds.
Calhoun County 2 E Leary	03	1735EST			0	0	2	0	Thunderstorm Wind
									Pataula Electric reported a large tree had fallen across a power line which resulted in numerous outages across the county.
Colquitt County 1 W Moultrie	03	1845EST			0	0	3	0	Thunderstorm Wind
									Thunderstorm winds downed several trees across power lines along U.S. Highway 319 which caused several power outages throughout Moultrie. A few small signs were also blown down along U.S. Highway 319.
Laurens County 2 S Dublin	04	1400EST			0	0	2	0	Thunderstorm Wind
									Several large trees were downed across the county, primarily in the Dublin area.
Telfair County Helena McRae	04	1600EST			0	0	3	0	Thunderstorm Wind
GEORGIA Cont'd									
									Thunderstorm winds downed several power lines along U.S. Highway 23 which caused numerous power outages in Helena and McRae.
Irwin County 10 W Ocilla to Ocilla	04	1730EST			0	0	3	0	Thunderstorm Wind
									A roof was blown off of a drugstore onto powerlines in Ocilla which knocked out electrical service to most of the county including a large portion Ocilla.

Storm Data and Unusual Weather Phenomena

August 1994

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
Turner County 10 SE Ashburn	04	1750EST			0	0	2	0	Thunderstorm Wind
Several trees were uprooted and blown across Georgia Highway 32, which also downed a few power lines.									
Crisp County 8 NE Cordele	05	1315EST			0	0	3	0	Thunderstorm Wind
Thunderstorm winds blew off a tin roof on an out building along Braintree Road, 8 miles northeast of Cordele in Northeast Crisp County. The roof fell onto power lines which resulted in scattered power outages along Braintree Road.									
Laurens County Dublin	05	1430EST			0	0	3	0	Thunderstorm Wind
Thunderstorm winds downed several large trees along U.S. 441 in Dublin.									
Worth County Sylvester	05	1515EST			0	0	1	0	Thunderstorm Wind
A large tree was downed by thunderstorm winds across Georgia Highway 112.									
Colquitt County 3 SE Moultrie	05	1610EST			0	0	5	0	Thunderstorm Wind
Lightning struck and caused extensive damage to an electric substation along Georgia Highway 33. Widespread power outages occurred throughout Colquitt County for 10 to 12 hours.									
Baker County Newton	05	1745EST			0	0	2	0	Thunderstorm Wind
Mitchell Electric reported numerous trees were blown down onto powerlines along Georgia Highway 200 in Newton.									
Bibb County 3 SW Macon	05	1915EST- 1945EST			0	0	3	0	Thunderstorm Wind
Thunderstorms winds downed numerous trees and power lines throughout Macon. One tree fell on a house and caused roof and rafter damage. Wind downed power lines caused numerous power outages in the vicinity of I-475.									
Chatham County Savannah	06	1600EST			0	0	2	0	Thunderstorm Winds
Thunderstorm winds downed several power lines and caused widespread power outages throughout Savannah.									
Hart County 4 S Hartwell	16	1239EST	1.0	100	0	1	5	0	Tornado (F1)
A tornado touched down near the intersection of Moore and Hickory Crossing Roads, in the Cedar Creek Church community, halfway between Georgia Highways 77 and 172, in southcentral Hart County. The tornado destroyed two mobile homes, rolled a third over and lifted a fourth off its foundation in the Cedar Creek Church community. The tornado uprooted several large trees as it moved northwest across Scott Town Drive and lifted and dissipated near Landfill Road. Total damage to property was estimated at \$320,000.									
GEORGIA Cont'd									
Oglethorpe County 5 N Lexington	16	1315EST	1.0	200	0	0	6	3	Tornado (F2)
A tornado touched and completely leveled a two-story, 2,500 square-foot wood-frame house, along Georgia Highway 22. The tornado moved northwest and destroyed 3 broiler houses, 2 chicken houses and killed 30,000 chickens approximately 0.25 mile from the leveled home. Several pecan trees were uprooted before the tornado lifted and dissipated. Most of the tornado damage occurred during the first 0.25 mile of its path. Total property damage was estimated at \$700,000.									

Storm Data and Unusual Weather Phenomena

August 1994

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
Dekalb County 2 S Chamblee	16	1520EST			0	0	2	0	Thunderstorm Winds
A couple of large trees were downed by thunderstorm winds at Dresden and Shallowford Roads near Interstate 85.									
Hall County 2 NW Flowery Branch	16	1532EST			0	0	0	0	Hail (0.88)
Cherokee County 11 NE Canton	16	1635EST- 1735EST			0	0	2	0	Thunderstorm Winds
The combination of saturated soil and 40 mph winds downed a few large trees along Georgia Highway 372 between Ball Ground and Free Home.									
Spaulding County	16 17	1600EST- 0800EST			0	0	4	0	Flood
Two to three inches of rain from Tropical Storm Beryl caused low-lying streets, culverts and streams to flood in Griffin.									
Newton County	16	1650EST- 2200EST			0	0	5	0	Flash Flood
The remnants of Tropical Storm Beryl dumped 3 to 4 inches of rain in less than 6 hours over Newton County and caused roads to flood or wash out and culverts to collapse. Nearly 8 inches of flood water covered Interstate 20 from 4 miles west of Covington to 3 miles east of Covington.									
Habersham County	16	1715EST- 2115EST			0	0	5	0	Flash Flood
The remnants of Tropical Storm Beryl dumped 5 to 7 inches of rain in less than 6 hours over Habersham County and washed out several roads and covered several bridges with water. One bridge on U.S. Highway 441 in northern Habersham County was washed away.									
Elbert, Stephens, Habersham, Hart, and Rabun Counties	16 17	2045EST- 0245EST			0	0	6	0	Flash Flood
The remnants of Tropical Storm Beryl dumped on average 3 to 5 inches of rain over the mountains of Northeast Georgia in less than 6 hours. Numerous roads across the five counties were covered with or washed away by flood waters. Several bridges were covered by floodwaters and a few were washed away. Numerous culverts and sewer lines were also damaged by the pressure of flood waters. Several mudslides along mountain roads were observed in the five county area.									
Zones 108 128 130 131 146 147 148 158 159	16 17	1500EST- 2000EST			0	0	3	0	Flood
Two-day rainfall totals of three to four inches from the remnants of Tropical Storm Beryl caused numerous roads to flood across the counties of South Georgia.									
Zones 10 16>18 23>29 34>40 47>51 59>63 72>75 84>85 97	16 17	2000EST- 2100EST			1	0	6	0	Flood

GEORGIA Cont'd

Heavy persistent rains from the remnants of Tropical Storm Alberto dumped 2-day rainfall totals that averaged 5 to 8 inches across the mountains of Northeast Georgia.

Over the counties of Rabun, Habersham and Stephens, 2-day rainfall totals averaged as high as 10 inches. One isolated 24-hour rainfall total of 13.3 inches was observed at Tallulah Falls in south Rabun County.

Mudslides, road and river flooding, and infrastructure damage was common throughout Northeast Georgia during the persistent rains.

Storm Data and Unusual Weather Phenomena

August 1994									
Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
One fatality occurred when a young man fell out of a raft on the rain-swollen Chattooga river, 8 miles west of Clayton in Rabun County, at approximately 1000 EST on the 17th. (M200)									
Berrien County	17	1709EST- 2000EST			0	0	5	0	Flash Flood
Remnants of Tropical Storm Beryl dumped 3 to 4 inches of rain in less than 24 hours over Berrien County. Numerous county roads were washed out or covered by flood waters. One home, 1 mile west of Nashville, was damaged by flood waters.									
Hall County Flowers Branch	18	1530EST			0	0	0	2	Hail (0.75)
EMA officials reported dime sized hail.									
Thomas County Thomasville	18	1845EST			0	0	2	0	Thunderstorm Wind
A few large trees were downed by thunderstorm winds in Thomasville.									
Thomas County 6 SE Thomasville	20	1615EST			0	0	3	0	Thunderstorm Wind
Thunderstorm winds downed six large oak trees along U.S. Highway 19.									
Bibb County 5 NW Macon	21	1300EST			0	0	4	0	Thunderstorm Wind
A parked car was severely damaged from a large oak tree blown down by thunderstorm winds along Tucker Road near Weslean College.									
Jones County 4 SE Gray	21	1305EST			0	0	2	0	Thunderstorm Wind
Power poles and lines were downed by thunderstorm winds along Georgia Highway 18.									
Walker County 8 W LaFayette	31	1643EST			0	0	2	0	Thunderstorm Wind
Trees and powerlines were reported down by County EMA near the town of Cedar Grove.									
IDAHO									
Please refer to the second section of Storm Data and Unusual Weather Phenomena .									
ILLINOIS									
Please refer to the second section of Storm Data and Unusual Weather Phenomena .									
INDIANA									
Fayette Connersville	04	1205EST		0	0	1K	0		Lightning
Bartholomew Burnsville	08	1200EST		0	0	0	0		Lightning
Miami Peru	08	1733EST		0	0	0	0		Hail (0.75)
INDIANA Cont'd									
Pulaski 1.0 S Lawton	08	1735EST		0	0	1K	0		Thunderstorm Wind
Miami 5.0 SE Peru	08	1746EST		0	0	0	0		Hail (1.75)
Wabash Wabash	08	1810EST		0	0	0	0		Thunderstorm Wind
Sheriff reported trees downed by thunderstorm winds.									

Storm Data and Unusual Weather Phenomena

August 1994										
Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage Property	Crops	Character of Storm	
					Killed	Injured				
Cass	08	1816EST		0	0	0	0	Hail (0.75)		
Vigo	08	1850EST		0	0	0	0	Hail (1.75)		
Crawford Hutsonville	08	1920EST			0	0	1K	0	Thunderstorm Wind	
Power lines blown down near Hutsonville Illinois.										
Fountain	08	1948EST			0	0	0	0	Hail (1.75)	
Carroll	10	1800EST			0	0	0	0	Hail (0.75)	
Marion Indianapolis	11	0640EST			1	0	0	0	Lightning	
Lightning critically injured a woman at a bus stop on Indianapolis' northwest side. Mary Cooke, age 63, was knocked unconscious after being struck. She died August 16th from cardiac arrest and heart damage that were the result of the lightning strike. (F63O)										
Marshall 3.0SE Bourbon	13	1715EST	.10	4	0	0	0	0	Tornado (F0)	
An Etna Green fireman reported a brief touchdown in an open field. The path length of the tornado was about 25 feet.										
Tippecanoe Battle Ground	13	1845EST			0	0	5K	0	Thunderstorm Wind	
Tippecanoe 8.0NE Buck Creek	13	1850EST			0	0	1K	0	Thunderstorm Wind	
Montgomery Darlington	13	1944EST			0	0	0	0	Thunderstorm Wind	
Elkhart 1.0N Nappanee	19	2010EST			0	0	0	0	Thunderstorm Wind	
Two trees blown down on County Road 5 just north of Highway 6.										
Jackson Medora	26	1442EST			0	0	0	0	Thunderstorm Wind	
Several trees and power lines reported down by State Police.										
Hancock Shirley	28	1700EST			0	0	5K	0	Thunderstorm Wind	
Bartholomew 3.5S Columbus	28	1820EST			0	0	0	0	Thunderstorm Wind	
Amateur radio operator reported trees blown down.										
IOWA										
Henry County Winfield	03	1015CST			0	0	3	2	Thunderstorm (G50+)	Winds
Wright County Clarion	03	1035CST			0	0	4	0	Lightning	
IOWA Cont'd										
Jasper County 6 S Newton	03	1300CST			0	0	3	4	Thunderstorm (G50+)	Winds
Benton County 1 N Vinton	03	1425CST			0	0	0	0	Funnel Cloud	
3 E Vinton	03	1440CST	0.1	20	0	0	0	0	Tornado (F0)	
Thunderstorms were numerous over Iowa throughout the day. Several weather features caused the										

Storm Data and Unusual Weather Phenomena

August 1994

August 1994									
Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage	Character of Storm	
					Killed	Injured	Property	Crops	
continual development. There was an upper level disturbance approaching from the west, while a trough of low pressure approached from the northwest. Farther northwest was an approaching arctic cold front. The atmosphere was very moist with deep moisture in place and convective available potential energy between 3000 and 3500 J-Kg ⁻¹ over much of the state. Even so, the situation was not overly conducive to severe weather. Thunderstorms moved over the west half of the state during the morning hours. The east half remained under partly sunny skies with thunderstorms erupting during the early afternoon hours, once the weak cap had broken. The storms produced heavy rainfall and some gusty winds. Only a few became severe. A severe thunderstorm moved through Winfield in Henry County, downing several trees. Another storm produced a brief microburst south of Newton in Jasper County. Many large tree limbs, up to 20 inches in diameter, were torn off. Crops were flattened in a narrow strip for about a mile downstream. Another storm produced a brief spin up tornado in Benton County. The tornado was observed by a boater as it touched down on Rogers Park Lake. It sucked up water briefly before breaking apart. One could call it a waterspout since it did occur over water, however meteorologically it had thunderstorm structure of a land event. For that reason it was listed as a tornado instead of a waterspout. During the morning, thunderstorms moved through Clarion. Lightning struck the chimney of the elementary school. Several blocks were knocked out of the top of it and the chimney was cracked all the way down to its junction with the main building.									
Osceola County									
5 N Sibley	07	1945CST			0	0	5	3	Thunderstorm Winds (G65)
Lyon County									
4 W Little	07	2000CST			0	0	3	2	Thunderstorm Winds (G50+)
Rock									
Osceola County									
3 SE Little	07	2015CST			0	0	4	0	Lightning
Rock									
7 NW Sibley	07	2015CST			0	0	3	4	Hail (0.88)
6.5 NW to	07	2016CST-							
2 N Sibley		2028CST	4.5	75	0	1	5	4	Tornado (F3)
Sibley	07	2030CST			0	0	5	0	Lightning
O'Brien County									
Primghar	07	2100CST			0	0	3	2	Thunderstorm Winds (G50+)
Winnebago County									
Lake Mills	07	2100CST			0	0	3	4	Hail (0.75)
Thompson	07	2120CST			0	0	3	4	Hail (0.75)
Cherokee County									
Larrabee	07	2120CST			0	0	4	4	Hail (1.75)
Cherokee	07	2125CST			0	0	5	4	Hail (2.00)
Winnebago County									
Leland	07	2130CST			0	0	3	4	Hail (0.75)
2 N Woden	07	2143CST			0	0	3	4	Hail (0.75)
Hancock County									
Woden	07	2143CST			0	0	3	4	Hail (0.75)
Woodbury County									
Anthon	07	2235CST			0	0	4	3	Thunderstorm Winds (G50+)
Danbury	07	2247CST			0	0	4	3	Thunderstorm Winds (G55)
Oto	07	2247CST			0	0	3	3	Thunderstorm Winds (G50+)
1 S Oto	07	2247CST			0	0	3	3	Thunderstorm Winds (G50+)
1 ESE	07	2247CST			0	0	3	3	Thunderstorm Winds (G50+)
Smithland									
Monona County									
2 NW Mapleton	07	2255CST			0	0	5	4	Thunderstorm Winds (G75)
Rodney	07	2255CST			0	0	3	3	Thunderstorm Winds (G50+)
Ticonic	07	2255CST			0	0	3	3	Thunderstorm Winds (G50+)

IOWA Cont'd

Storm Data and Unusual Weather Phenomena

August 1994

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
Mapleton	07	2256CST			0	0	5	4	Thunderstorm Winds (G65)
6 SW Sibley	07	2300CST			0	0	5	0	Lightning
Woodbury County	07	2310CST			0	0	4	0	Lightning
7 NE Mapleton	07	2315CST			0	0	3	2	Thunderstorm Winds
Monona County									(G50+)
Ute	07	2315CST			0	1	3	2	Thunderstorm Winds
Crawford County	07	2315CST			0	0	3	3	(G50+)
Schleswig	07	2315CST			0	0	3	3	Thunderstorm Winds
Charter Oak	07	2315CST			0	0	4	2	(G50+)
Harrison County	07	2345CST			0	0	4	2	Thunderstorm Winds
Dunlap	07	2345CST			0	0	4	0	(G50+)
Shelby County	08	0000CST			0	0	4	0	Lightning
Harlan	08	0115CST			0	0	3	2	Thunderstorm Winds
Pottawattamie									(G50+)
County									
Council Bluffs									

Warm, humid, and very unstable air moved over Iowa during the afternoon of the 7th. A warm front moved northeast across the state during the day. During the late afternoon hours a cold front approached the northwest corner of the state. Very humid air was drawn north just ahead of the cold front. Dew point temperatures were in the lower to middle 70s over most of the state by evening. Northwest flow in the middle and upper levels brought in relatively cool air aloft over the area. As a result the lifted indices were in the -10 to -12. range. By early evening, convective available potential energy values reached 4000-6000 J-Kg⁻¹ over much of the west half of Iowa. Thunderstorms fired in two areas initially. The first was over southern Minnesota. The second was over north central Nebraska. The two areas propagated south and grew toward each other with time. Though the storms were tornadic over Minnesota, the main severe weather event for Iowa was hail and high winds. The Minnesota convection dropped into north central and northeast Iowa. Dime-size hail was the result. There were sporadic reports of marble to dime-size hail for about 45 minutes over Winnebago County. Dime-size hail also fell over northwest Hancock County as the storm entered the Woden area. After this time, they weakened as they continued to move south-southeast. As the mesoscale convective system over Nebraska built into southeast South Dakota and northwest Iowa, high winds and hail resulted. Hail ranged in size from three quarter inch to golf ball in size. In Cherokee County, hail damage was reported to many cars in the city of Cherokee by hail 2 inches in diameter. Reports showed at least 150 cars and 100 homes were damaged by the hail. A tornado touched down northwest of Sibley, in Osceola County. One farmstead was hit with damage reported to several buildings, one was destroyed. A woman received minor injuries when she was cut on the hand by flying glass. Five hogs were killed when a concrete block building was collapsed. The building housed 300 hogs. A silo was destroyed on the farm and carried a mile to the south. At the same time one of the cars was lifted and thrown 50 feet. At about the same time, a farmhouse in rural Sibley was struck by lightning. The house was set on fire and was totally lost. Also in Osceola County, north of Sibley, a farmstead was hit by high winds in advance of the tornado. A concrete was destroyed and the end of the barn was completely removed. Woodbury and Monona Counties were hard hit by high winds. The first reports came from Danbury, where 60 to 65 MPH winds were reported. Numerous reports of trees and power lines being downed by high winds were received from Woodbury County. In Monona County, Mapleton and the area around it were hard hit. In the town of Mapleton, the roof was blown off of a car dealership, and the roof was caved in on one apartment building. In the downtown area, winds blew out a three quarter inch thick plate glass window. Several farmsteads were damaged by the winds as well. Two farms had significant structural damage. Another reported one grain bin blown off its foundation, and six others had the sides collapsed and bent over. Twelve hogs were killed when a quonset building was destroyed. One man was injured in Crawford County when high winds downed a large tree limb in front of the car that he was driving. The storms continued south, though they had weakened with winds around 50 MPH. Spotty damage occurred. High winds downed trees and limbs in Harrison County at Dunlap and Pottawattamie County at Council Bluffs. Several tents were blown down by the wind at the County Fair in Dunlap as well. There were also several lightning strikes. Lightning set a house on fire southwest of Sibley, destroying it. A barn was a total loss to fire northeast of Mapleton when lightning struck it. Another storm moved across Shelby County. Lightning struck two houses in Harlan. Damage occurred to each, but actual dollar amount was not available.

Storm Data and Unusual Weather Phenomena

August 1994

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

IOWA Cont'd

IAZ003>005-015-023-024
Northwest Iowa

**11 0600CST-
18 1800CST** **0 0 3 4 Flooding**

Preliminary information provided by the State Climatologist Harry Hillaker, Iowa Department of Agriculture and Land Stewardship, indicated a statewide precipitation average of 3.68 inches for the month. This figure was 91% of the normal 4.03 inches. Flooding in Iowa during the month of August was isolated in nature. Persistent rainfall over northern Iowa and southern Minnesota from the 10th through the 12th resulted in minor flooding in the upper reaches of the Des Moines River Basin. Rainfall amounts exceeded 3 inches in some areas. Impacts were minor and limited to crop damage and minor flooding occurred in close proximity to the river channel.

Bremer County

**13 0200CST-
0700CST** **0 0 5 3 Urban Flooding**

Thunderstorm formed over Bremer County during a several hour period. The storms dumped 5 inches of rain in the Denver area. Reports indicated that 5 inches of rain had fallen in a four hour period. The rain caused flooding in urban areas, with streets being flooded for a time.

IAZ027-028-038-039
Northeast Iowa

**14 1200CST-
15 2100CST** **0 0 4 4 Flooding**

Heavy thunderstorms over northeast Iowa on the 12th and 13th produced flooding around the Waterloo area. Rainfall amounts in excess of 3 inches in some areas were common. Once again, flooding was relatively minor and limited to minor agricultural lands and some flooding in close proximity to the stream channel.

Mitchell County

Orchard	17 1710CST			0 0 4 4 Hail (2.00)
5 NE Orchard	17 1735CST			0 0 3 4 Hail (1.00)
New Haven	17 1740CST			0 0 3 4 Hail (1.00)
3 E Orchard	17 1744CST			0 0 0 0 Funnel Cloud
5 E Osage	17 1751CST			0 0 0 0 Funnel Cloud
3 E Osage	17 1756CST	0.2	25	0 0 0 3 Tornado (F0)

Howard County

5 N Elma	17 1854CST			0 0 3 4 Hail (0.75)
5.5 E Saratoga	17 1940CST			0 0 3 4 Thunderstorm Winds (G61)
5.5 E Saratoga	17 1950CST			0 0 3 4 Hail (0.75)
5 N Lourdes	17 2010CST			0 0 3 4 Hail (0.75)
Howard County	17 2015CST- 2300CST			0 0 4 4 Flash Flooding

Unstable air was over Iowa during the afternoon of the 17th. Convective available potential energy values were in the 2000 J-Kg⁻¹ range. An upper level disturbance moved along the northern border of Iowa during the evening hours. This disturbance produced a weak surface low pressure area over southeast Minnesota by midnight. An area of thunderstorms formed and did produce severe weather for about three hours. Large hail pelted portions of Mitchell County with hail up to 2 inches in diameter. Significant hail fell in both Mitchell and Howard Counties. In Mitchell County in New Haven, and in Howard County north of Lourdes, hail covered the ground completely. In fact, reports indicate the hail was deep enough to leave tracks when driven through. One tornado touched down east of Osage. The tornado was only on the ground briefly in a corn field. Heavy rainfall fell over Howard County. Rainfall between three and four inches fell in .5 to 1.5 hours time. This resulted in flash flooding. Several creeks and streams overflowed their banks and some county roads were overtopped with water. Street flooding was widespread throughout the county.

Clayton County
Edgewood

18 0300CST **0 0 5 3 Thunderstorm Winds (G50+)**

Thunderstorms moved across northeast Iowa throughout the night. In what appeared to be a downburst situation, high winds struck a farm near Edgewood. A narrow path could be seen in the fields surrounding the farm. The farmstead that sustained damage reported one barn blown down by the winds. Sixty head of cattle were within the barn, 12 of them were killed in the collapse. The

Storm Data and Unusual Weather Phenomena

August 1994

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
garage was pulled away from the farm house and toys were strewn across the fields downwind. A chopper box was also overturned.									
IOWA Cont'd									
Jackson County									
Bellevue	18	1820CST			0	0	3	4	Hail (0.75)
Maquoketa	18	1825CST			0	0	3	4	Hail (0.75)
Bellevue	18	1832CST			0	0	3	4	Hail (0.75)
Dubuque County									
Dubuque	18	1950CST			0	0	3	4	Hail (0.75)
Thunderstorms erupted in an unstable airmass over Iowa. The first storms developed near an old outflow boundary formed from the previous nights convection. The storms produced gusty winds and heavy rainfall for the most part. Three quarter inch diameter hail fell in Jackson and Dubuque Counties. Property damage was minor, however the hail did cause quite a bit of crop damage.									
Mitchell County									
Osage	19	1135CST			0	0	3	4	Hail (1.00)
Chickasaw County									
Nushua	19	1200CST			0	0	3	4	Hail (1.00)
Floyd County									
Charles City	19	1215CST			0	0	4	4	Hail (1.75)
Bremer County									
2 N Sumner	19	1236CST			0	0	4	4	Hail (1.75)
Allamakee County									
Postville	19	1245CST			0	0	3	2	Thunderstorm (G50+) Winds
Clayton County									
McGregor	19	1300CST			0	0	3	2	Thunderstorm (G50+) Winds
Fayette County									
Fayette	19	1306CST			0	0	4	4	Hail (1.75)
Randalia	19	1306CST			0	0	4	4	Hail (1.75)
.5 S Randalia	19	1307CST			0	0	4	5	Hail (2.75)
Clayton County									
Elkader	19	1337CST			0	0	3	4	Hail (1.00)
Guttenberg	19	1405CST			0	0	3	4	Hail (1.00)
Buena Vista	19	1415CST			0	0	3	2	Thunderstorm (G50+) Winds
Dubuque County									
Balltown	19	1438CST			0	0	3	2	Thunderstorm (G50+) Winds
5 N Dubuque	19	1440CST			0	0	4	2	Thunderstorm (G50+) Winds
Durango	19	1445CST			0	4	4	4	Hail (2.50)
Durango	19	1445CST			0	4	4	3	Thunderstorm (G50+) Winds
Sageville	19	1450CST			0	0	4	3	Thunderstorm (G50+) Winds
Sageville	19	1455CST			0	0	5	4	Hail (2.50)
Dubuque	19	1505CST			0	0	5	2	Thunderstorm (G50+) Winds
Dubuque	19	1505CST			0	0	6	4	Hail (4.50)
Jackson County									
	19	1530CST-1630CST			0	0	3	3	Urban Flooding
Jackson County									
Bellevue	19	1545CST			0	0	4	4	Hail (2.00)
Bellevue	19	1602CST			0	0	4	3	Thunderstorm (G50+) Winds
Green Island	19	1610CST			0	0	3	3	Thunderstorm (G50+) Winds
Green Island	19	1620CST			0	0	4	4	Hail (1.75)
Clinton County									
Delmar	19	1624CST			0	0	3	4	Hail (1.00)

Storm Data and Unusual Weather Phenomena

August 1994									
Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
12 NW Clinton	19	1635CST			0	0	3	4	Hail (0.75)
Elvira	19	1650CST			0	0	3	4	Hail (0.75)
Clinton	19	1655CST			0	0	3	4	Hail (0.75)
Dubuque County									
Zwingle	19	1701CST			0	0	3	4	Hail (1.00)
Jackson County									
La Motte	19	1704CST			0	0	3	4	Hail (0.75)
Clinton County									
1 N Clinton	19	1715CST			0	0	3	2	Thunderstorm Winds (G50+)
Jackson County									
La Motte	19	1730CST			0	0	3	4	Hail (0.75)
IOWA Cont'd									
Clinton County	19	1745CST- 2030CST			0	0	4	2	Urban Flooding
<p>Low pressure tracked to the north of Iowa while its attendant cold front moved southeast into the state. The airmass over the state was of marginal instability. Lifted indices were around -4 and convective available convective energy was in the 1000 to 2000 J-Kg⁻¹ range. At the same time, a strong upper level disturbance was approaching Iowa from the northwest, but it lagged the front by a few hundred nautical miles. The driving force with this event was the jet stream dynamics. A jet maximum was approaching from the northwest and entered the north central counties of the state around mid day. The flow was strongly divergent over the east half of Iowa. Low level winds had veered through the day resulting in meager inflow to the storms. Isolated thunderstorms developed over south central Minnesota and tracked southeast into Iowa during the afternoon. The main feature with them was hail. There were several reports of hail ranging in size from three quarter inch to nearly three inches in diameter. The hail caused extensive crop damage over northeast Iowa. South of Randalia, for example, baseball size hail destroyed crops. One farmer reported his 90 acre corn field was a total loss...shredded to the ground. Farther southeast, major property damage occurred. A report of hail of tennis ball in size was received northwest of Dubuque near Durango. A short time later, hail of tennis ball to baseball size was reported in the area around and in Dubuque. WSR-88D VIL values were in the 65 to 70 KG-M² range during most of the severe hail occurrences. Most of the storms produced at least pea to marble size hail. Most of the storms produced wind gusts of at least 30 to 40 MPH. High winds buffeted the east edge of Iowa. Trees were blown down in Dubuque, Jackson, and Clayton Counties. A camper was overturned in Jackson County at Bellevue. A tree fell on a mobil home northwest of Dubuque, splitting it in half and destroying it. The combination of high winds and tennis ball size hail near Durango resulted in eight injuries. People were injured by being struck by hail and flying glass. They were taken to the hospital in Dubuque, treated, and released. Serious damage occurred in the city of Dubuque due to the combination of high winds and the large hail. The hail was as large as soft balls in some areas of town, with hail falling for a 30 minute period. Some of the car insurance claims included one agency reporting 25 vehicle claims averaging \$4500 each, another had over 100 vehicles with average damage over \$3000, and yet another reporting 15 claims averaging between \$2000 and \$4000 each. Hundreds of homes in the city had windows blown out. The storm was described by city officials as the worst storm to hit the city in at least 20 years. One resident said it was the worst storm he had seen in Dubuque in 42 years. Wind driven hail actually punctured through the sides of a few homes with hail reported inside the homes. At one point, power was cut to 6000 residents in the city, or about 10% of the city. The winds removed about 1/3 of the roof off of the high school, with damage placed at \$75,000. Overall, the Dubuque school district reported about \$150,000 damage. The full seriousness of the situation will not be known for some time, however, at the time of this writing between 10,000 and 15,000 insurance claims for home and auto had already been filed. Minor flooding occurred over Clinton County. In the city of Clinton, two inches of rain fell in a short time, under an hour, resulting in significant urban flooding within the city. Major flooding was alleviated as the ground was quite dry and the storms were moving at nearly 25 knots. Minor urban flooding in the form of flooded streets occurred in Jackson County as well. This was especially true in the Bellevue area.</p>									
Keokuk County									
Sigourney	25	1015CST			0	0	4	2	Thunderstorm Winds (G50+)
Washington County									
Washington	25	1050CST			0	0	3	0	Lightning

Thunderstorms moved across parts of southeast Iowa. As the storms moved through the Sigourney

Storm Data and Unusual Weather Phenomena

August 1994

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

area, high winds downed trees and large branches throughout the city. As the storms progressed farther east, lightning struck a bulk plant in Washington. The lightning started a small fire there causing minor damage.

Floyd County 4 SW Rockford	25	1147CST			0	0	5	4	Thunderstorm Winds (G65)
Butler County 8 SE Allison	25	1230CST			0	0	3	2	Thunderstorm Winds (G52)
Black Hawk County Waterloo	25	1353CST			0	0	3	1	Thunderstorm Winds (G52)
Evansdale	25	1410CST			0	0	3	4	Hail (1.00)
Black Hawk County	25	1400CST- 1800CST			0	0	5	4	Flash Flooding
IOWA Cont'd									
Monona County Mapleton	25	1500CST			0	0	4	0	Lightning
Clayton County 2 NE Volga	25	1515CST			0	0	4	0	Lightning
Kossuth County Algona	25	1633CST			0	0	4	3	Thunderstorm Winds (G65)
Ida County Battle Creek	25	2113CST			0	0	3	0	Lightning

Warm and humid air was over Iowa during the afternoon hours. The actual frontal system approaching the area was well to the northwest. An upper level disturbance passed across the state along the southern edge of the westerlies. Thunderstorms erupted over northern Iowa and advanced southeast during the afternoon and evening hours. The storms were not severe as they tracked across the southern part of the state however. Spotty severe weather was reported with high winds over parts of northeast Iowa. Scattered reports of trees and power lines down were received. High winds in Floyd County destroyed two barns and damaged some crops. In Kossuth County, several sheds were damaged by the winds in the Algona area which were as high as 75 MPH. Hail around an inch in diameter pelted the Evansdale area in Black Hawk County. Heavy rains also caused flash flooding in Black Hawk County. The city of Waterloo was especially hard hit. Three to five inches of rain fell in a one to two hour period, flooding underpasses. Water was up to 2 feet deep in several areas of the city. Other flooding was reported in the county, but the worst was in the city itself. There were a few damage reports caused by lightning strikes. Lightning struck a food market in Mapleton. It blew out the cash registers, phones, and several pieces of electrical equipment. Another lightning strike occurred at Volga in Clayton County. Lightning struck a tree next to a house, traveled down the trunk of the tree and entered the house through the telephone wire. The result was an explosion as the lightning blew out the wiring in the house. Twenty one windows were blown out by the force of the explosion. Later in the evening, lightning struck a house in Ida County. It started a minor fire, resulting in about \$1000 in damage.

Polk County	30	0630CST- 0800CST			0	0	4	3	Urban Flooding
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Thunderstorms moved east across the state. Although they were not severe, they did produce heavy rainfall. This was especially true over the central counties. Rainfall of one to one and one half inches occurred over Polk County. This caused street flooding in the Des Moines metro area during the rush hour. Reports indicated rainfall of up to two and one half inches over the east side of the city. The flooding abated fairly quickly however.

KANSAS

Please refer to the second section of **Storm Data and Unusual Weather Phenomena**.

KENTUCKY

Please refer to the second section of **Storm Data and Unusual Weather Phenomena** for additional information.

Gallatin Junction	11	1330EST			0	0	1K	0	Thunderstorm Wind
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Large trees blown down southeast of Junction.

Storm Data and Unusual Weather Phenomena

August 1994

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

LOUISIANA

Please refer to the second section of **Storm Data and Unusual Weather Phenomena**.

MAINE

York County	21	1615EST			0	0	?	0	Thunderstorm Winds
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The York County Sheriff reported numerous trees and power poles down in Lebanon. Several homes received roof damage directly attributed to the wind. The local power company reported lost power to more than 1000 customers across the county.

MARYLAND

Wicomico County 5E Salisbury	02	1024EST			0	0	0	0	Funnel Cloud
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U.S. Air pilot reported sighting a funnel cloud five miles north of Salisbury Airport. There was no damage reported or any indication that the funnel ever touched down.

Worcester County 2E Ocean City	05	1510EST			0	0	0	0	Funnel Cloud
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Ocean City Beach Patrol sighted a funnel cloud out of a thunderstorm over the ocean just east of 27th Street. They had already cleared the beach due to the threat of lightning from the storm. Funnel was not seen to have touched down on the water.

Carroll County Winfield	11	2050EST			0	2	4	0	Lightning
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Two people were struck by lightning but refused medical treatment. A nearby barn filled with hay was struck by lightning and set on fire. The barn was in the Winfield area off Woodbine Road. The barn was destroyed with estimated damages of \$30,000.

Howard County Ellicott City	13	1547EST			0	0	2	0	Thunderstorm Winds (G54)
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Wind equipment measured a 62 mph gust from a thunderstorm near Ellicott City.

Baltimore County Baltimore City	13	1700EST			0	0	3	0	Thunderstorm Winds
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Thunderstorm winds downed a tree near Pratt and Charles Street in downtown Baltimore and blew out a couple windows.

Frederick County	13	1700EST- 1710EST			0	0	2	2	Thunderstorm Winds
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Carroll County	13	1710EST- 1720EST			0	0	0	2	Hail(0.75)
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Howard County	13	1710EST- 1720EST			0	0	0	2	Hail(0.75)
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Thunderstorm winds knocked down large branches and power lines near the Mount Airy area of Frederick County and pea-size hail fell for 5 to 10 minutes. Three-quarter inch hail covered the ground in the Mount Airy area along the Carroll and Howard County lines.

Harford County	14	1515EST			0	0	0	0	Funnel Cloud
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A funnel cloud was sighted in the northwest part of the county. It did not touch down.

St. Marys County Compton	17	0850EST			0	5	0	0	Thunderstorm Winds
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Thunderstorm winds destroyed a two story house under construction in Compton. It tossed a 500-600 pound utility trailer a couple hundred yards and tossed some lumber around.

Calvert County N Portion	17	1005EST- 1015EST	2.0	50	0	0	2	0	Tornado(F0)
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Storm Data and Unusual Weather Phenomena

August 1994								
Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed Injured		Estimated Damage Property Crops	Character of Storm
At 10:05 EST a funnel was sighted near Sunderland with swirling debris and trash. A funnel was also sighted near Route 260 and Owings and a couple of trees were blown down.								
Harford County	17	1100EST- 1200EST			0	0	2 0	Flood/Flash Flood
Heavy rains dumped over 2.50 inches of rain on the western portion of the county in a couple hours causing flooding of streams and some roads.								
Frederick County	17	1800EST- 1930EST			0	0	2 0	Flood/Flash Flood
Washington County	17	1600EST- 1830EST			0	0	4 ?	Flood/Flash Flood

MARYLAND Cont'd

Heavy thunderstorm rains from the remnants of Tropical Storm Beryl dropped 3.00 to 5.00 inches of rain over Frederick and Washington Counties. Hagerstown recorded its fourth heaviest rainfall ever. Roads, yards and basement flooded. Antietam Creek rose to 8 feet out of its banks.								
Frederick County Frederick	21	1428EST			0	0	5 0	Lightning
Lightning struck and burned a historic barn in the city of Frederick at the School for the Deaf.								
Carroll County Winfield	21	1538EST			0	0	4 0	Lightning
Lightning struck a barn full of hay at the Shamrock Farm near Winfield for the second time in 10 days. The barn burned to the ground.								
Baltimore County	21	1615EST			0	0	2 0	Thunderstorm Winds
Thunderstorm winds blew down trees and caused power outages.								

DISTRICT OF COLUMBIA

None reported.

MASSACHUSETTS

Middlesex County Reading	05	1120EST			0	0	5 0	Lightning
A lightning strike ignited a fire which gutted a barn, resulting in a loss of an estimated \$50,000.								
Bristol County Rehoboth Raynham	05	1330EST- 1338EST			0	0	? 0	Lightning
Local police reported trees blown down. Numerous accidents were reported by Rehoboth police due to ponding of water on roadways.								
Plymouth County Middleboro	05	1350EST			0	0	? 0	Thunderstorm Winds
Police reported several trees and branches blown down. In the adjoining town of Lakeville, a tree branch went through a truck windshield. No injuries were reported.								
Worcester County Milford	05	1450EST			0	0	5 0	Lightning
A bolt of lightning hit a tree then ricocheted onto the roof of a house igniting a fire which gutted the attic and resulted in major water damage to the first and second floors of the house. Damage was estimated at about \$50,000.								
Berkshire County Pittsfield	13	0455EST- 0515EST			0	0	? 0	Thunderstorm Winds
There were numerous reports of trees and wires down, resulting in power outages.								

Storm Data and Unusual Weather Phenomena

August 1994									
Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
Middlesex County S Portion	13	0630EST- 0730EST			0	0	?	0	Lightning
Suffolk County	13	0700EST- 0830EST			0	0	?	0	Lightning
Middlesex County Weston Newton Natick	13	0720EST- 0730EST			0	0	?	0	Thunderstorm Winds
An early morning thunderstorm with unusually frequent cloud to ground lightning moved eastward across the western suburbs of Boston and then directly across the city. In Weston and Newton,									
MASSACHUSETTS Cont'd									
several trees and power lines were knocked down by strong winds. Lightning strikes blew out transformers and knocked out power to an estimated 20,000 customers from Sudbury to Boston. Small hail was reported by the National Weather Service at Logan International Airport in Boston. The Boston Fire Department reported its busiest two hours on record as lightning strikes cut off power, triggered alarm systems and heavy rain flooded roads. Lightning detection systems recorded around 20 cloud to ground strikes per minute or around 1,200 strikes per hour, continuing for more than an hour.									
Worcester County Worcester	13	1715EST			0	0	5	0	Thunderstorm Winds (G60)
Trees were blown down near Rutledge/Granite/Loxwood Streets and insulation was torn from the roof of an apartment building and blown several hundred yards away. A microburst associated with a severe thunderstorm likely caused this damage.									
Essex County Danvers	13	1735EST			0	0	?	0	Thunderstorm Winds
Seventy-five to 100 trees were reported blown down and 50 to 60 telephone poles were knocked down, per local police.									
Essex County Beverly	13	1745EST- 1800EST			0	0	6	0	Thunderstorm Winds (G62)
Local police reported numerous trees blown down. At the Beverly Airport, a wind gust to an estimated 70 to 75 mph occurred during a severe thunderstorm, flipping over several light aircraft and damaging a total of 14 aircraft. Five were damaged beyond repair.									
Norfolk County Millis	13	1720EST			0	1	0	0	Lightning
A man was struck by lightning while riding a golf cart at a local country club. He was treated and released at a nearby hospital.									
Norfolk County Foxboro	13	1730EST			0	22	4	0	Lightning
Lightning struck in two places at the Normandy Farms Campgrounds including one bolt that crashed through the roof of the recreation center. Another struck one or more trees and traveled through the ground beneath the feet of people holding onto aluminum tent poles or standing in water. Twelve campers were taken to area hospitals. At least ten others were treated for injuries at the scene. None of the injuries was serious. Elsewhere in Foxboro, lightning strikes ignited fires in a barn and a shed resulting in about \$40,000 damage. Also in Norfolk County, the Blue Hill Observatory in Milton recorded 1 inch of rain in just 12 minutes and a wind gust to 54 mph just after 7PM local time.									
Plymouth County Brockton	14	1155EST			0	0	?	0	Thunderstorm Winds
Police reported several trees blown down.									
Berkshire County Peru	21	1435EST- 1445EST			0	0	?	0	Thunderstorm Winds (G50)

Storm Data and Unusual Weather Phenomena

August 1994									
Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
Trees were reported blown down.									
Hampshire County Cummington	21	1455EST			0	0	?	0	Thunderstorm Winds
Trees were reported blown down.									
Franklin County Millers Falls	21	1513EST			0	0	?	0	Thunderstorm Winds
Trees were reported blown down.									
MASSACHUSETTS Cont'd									
Middlesex County Townsend	28	2210EST			0	0	?	0	Thunderstorm Winds
A few large trees, some up to one foot in diameter, and power lines were knocked down. A peak gust to 47 mph was reported. Up to 4,200 homes lost power in towns which included Ashby, Lunenburg, Townsend, and Fitchburg.									
MICHIGAN									
Please refer to the second section of Storm Data and Unusual Weather Phenomena .									
MINNESOTA									
Clay County S Moorhead	02	2000CST			?	?	?	?	Hail (1.75)
Crow Wing County 3.5SW Brainerd	07	1435CST			0	0	0	1K	Hail (2.00)
1W Pine Center	07	1500CST			0	0	0	0	Hail (1.00)
Morrison County 2S Little Falls	07	1530CST			0	0	0	0	Hail (0.75)
Yellow Medicine County Wood Lake	07	1620CST			0	0	?	?	Hail (1.75)
Renville County 1N Olivia	07	1633CST	0.1	10	0	0	0	0	Tornado (F0)
A tornado touched down briefly near Olivia and reportedly did no damage.									
Kandiyohi County 15S Willmar	07	1638CST	0.1	10	0	0	?	?	Tornado (F0)
A tornado touched down briefly near Willmar toppling trees and power lines.									
Redwood County Vesta	07	1650CST			0	0	0	0	Hail (0.75)
Wabbaso	07	1659CST			0	0	0	0	Hail (0.75)
Renville County Hector	07	1700CST			0	0	0	0	Hail (1.00)
5NE Fairfax	07	1722CST	0.1	10	0	0	0	0	Tornado (F0)
A tornado touched briefly near Fairfax and reportedly did no damage.									
Redwood County Lamberton	07	1735CST			0	0	0	0	Hail (0.75)
Cottonwood County 3N Westbrook	07	1750CST			0	0	?	?	Hail (0.75)
Nicollet County 1E Courtland	07	1824CST- 1834CST	0.5	30	0	0	0	?	Tornado (F0)

Storm Data and Unusual Weather Phenomena

August 1994

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
									A tornado briefly touched down in an open farm field and damaged 5 acres of corn, about 1 mile east of Courtland.
Murray County Fulda	07	1828CST			0	0	?	?	Hail (1.75)
.5S Fulda to 5W Kinbrae	07	1835CST- 1850CST	3.0	100	0	0	0	10K	Tornado (F1)
									A tornado developed just south of Fulda (Murray CO.) and travel led slowly southeastward into extreme northern Nobles Co. near Kinbrae before dissipating. No buildings were damaged but a few
MINNESOTA Cont'd									
									hundred acres of corn were affected.
Blue Earth County Judson	07	1844CST			0	0	0	0	Funnel Cloud
									Several funnel clouds were spotted over Judson.
Rapidan	07	1845CST			0	0	?	?	Hail (1.75)
									Golfball size hail pelted Rapidan.
Nobles County 4W Kinbrae	07	1845CST			0	0	?	?	Hail (1.75)
Le Sueur County St. Thomas	07	1850CST			0	0	?	?	Thunderstorm Winds
									Strong thunderstorm winds damaged a power station and blew over a large shed in St. Thomas.
Nobles County 4.5W-8NW Worthington	07	1900CST- 1920CST	6.0	500	0	0	.5M	?	Tornado (F1)
									Several buildings on two farmsteads were destroyed. A number of hogs were killed and trees and power lines were blown down.
Blue Earth County 1S Good Thunder- 1SE Good Thunder	07	1902CST- 1908CST	1	15	0	0	0	?	Tornado (F1)
									A tornado touched down in a corn field 1 mile south of Good Thunder. It tracked to the east-southeast for approximately 1 mile and flattened a field of corn.
Garden City	07	1911CST			0	0	?	?	Hail (1.75)
									Golfball size hail was reported in Garden City.
Le Sueur County Center	07	1914CST			0	0	?	?	Thunderstorm Winds
									Strong winds blew out windows and tore shingles and siding off of a few homes in Le Center. Power lines were also knocked down.
Blue Earth County 3E Vernon Center- 1E Sterling Center	07	1920CST- 1931CST	5	40	0	0	50K	?	Tornado (F2)
									This tornado touched down near County Road 10 in Lyra Township, 3 miles east of Vernon Center. As it tracked to the southeast, it damaged 4 barns, 2 mobile homes and 2 homes. It then entered Sterling Township, caused significant crop damage by flattening a path through a corn field. It damaged 3 more barns and 9 more homes before lifting off the ground about 1 mile east of Sterling Center. Despite the amount of damage, there were no injuries or fatalities. Overall, 12-14 buildings received structural damage and 7 barns were damaged.
Waseca County 3SW Waterville	07	1925CST			0	0	0	0	Funnel Cloud
									Several funnel clouds were sighted over Reeds Lake, about 3 miles southwest of Waterville.
Nobles County Worthington	07	1927CST			0	0	?	?	Hail (1.75)

Storm Data and Unusual Weather Phenomena

August 1994								
Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage	
					Killed	Injured	Property	Crops
Character of Storm								
Waseca County 2SE Waterville	07	1930CST			0	0	?	?
								Hail (1.75)
								Golfball size hail was reported 2 miles southeast of Waterville.
5SW Waterville	07	1930CST	1	20	0	0	?	?
								Tornado (F1)
								A tornado touched down on a farmsted on County Road 14 about 5 miles southwest of Waterville. It knocked down some trees, and damaged a shed, 2 silos, a cornfield, and an outdoor pool.
7SW Waterville	07	1935CST			0	0	?	?
								Hail (2.00)
								Overgrown golfball size hail was reported 7 miles southwest of Waterville.
MINNESOTA Cont'd								
Nobles County 2W Ransom	07	1955CST			0	0	?	?
								Hail (0.88)
Faribault County Easton	07	2000CST			0	0	?	?
								Hail (2.00)
								Hen egg size hail pelted Easton.
Kiester	07	2025CST			0	0	?	?
								Hail (2.75)
								Baseball size hail pelted Kiester.
6E Blue Earth	07	2040CST			0	0	?	?
								Hail (1.75)
								Golfball size hail reported 6 miles east of Blue Earth.
Redwood County Vesta	09- 10	0800CST 0800CST			0	0	?	?
								Flash Flood
								Four to seven inches of rain fell over the northern one-half of the county causing considerable flooding of homes and businesses in Vesta. An unofficial report of 7.99 inches occurred near Milroy. The Redwood River near Redwood Falls reached flood stage (6.0 FT) on the 11th.
Roseau County Roseau	12	2202CST			0	0	0	?
								Thunderstorm Winds
								Severe thunderstorm winds downed trees and power lines in Roseau.
Aitkin County 1W Mora	12	2345CST			0	0	0	1K
								Thunderstorm Winds (G60)
Becker County SW of Detroit Lakes	13	0117CST			?	?	?	?
								Thunderstorm Winds (G52)
Ottertail County Perham	13	0130CST			?	?	?	?
								Thunderstorm Winds (G58)
Todd County Staples	13	0217CST			0	0	0	0
								Hail (0.75)
Marshall County SW of Stephen	18	1905CST			?	?	?	?
								Hail (1.00)
Le Sueur County New Prague	19	0447CST			0	0	?	?
								Hail 225
								Hail with a diameter of 2 1/4 inches fell in New Prague.
Rice County Shieldsville	19	0505CST			0	0	?	?
								Hail (1.75)
								Golfball size hail pelted Shieldsville.
2W Faribault	19	0514CST			0	0	?	?
								Hail (1.75)
								Golfball size hail was reported just 2 miles west of Faribault.
Dodge County Wasioja	19	0620CST			0	0	?	0
								Hail (0.75)

Storm Data and Unusual Weather Phenomena

August 1994

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
			Dime size hail fell in Wasioja.						
Stearns County Melrose	23	1603CST			0	0	0	0	Hail (0.75)
Paynesville	23	1619CST			0	0	0	0	Hail (1.00)
Meeker County Watkins	23	1649CST			0	0	0	0	Thunderstorm Winds (G50)
Eden Valley	23	1650CST			0	0	0	0	Hail (0.75)
MINNESOTA Cont'd									
Stearns County Kimball	23	1654CST			0	0	?	?	Hail (1.75)
Wright County 2S Annandale	23	1710CST			0	0	?	?	Thunderstorm Winds Hail (1.75)
2S Maple Lake	23	1754CST			0	0	?	?	Thunderstorm Winds (G52)
Anoka County Blaine	23	1818CST			0	0	?	?	Thunderstorm Winds
			A small airplane was blown into a fence by strong thunderstorm winds.						
Hennepin County Rogers	23	1823CST			0	0	?	?	Thunderstorm Winds
			A number of trees were blown down by strong thunderstorm winds.						
Pope Coutny Starbuck	25	1420CST			0	0	?	?	Thunderstorm Winds
			Trees and power lines were blown down by strong thunderstorm winds.						
Douglas County Osakis	25	1428CST			?	?	?	?	Hail (0.75)
Morrison County Randall	25	1445CST			0	0	?	?	Hail (1.50)
Stearns County Albany	25	1455CST			0	0	?	?	Thunderstorm Winds
			Trres and power lines blown down.						
Morrison County Flensburg	25	1500CST			0	0	?	?	Thunderstorm Winds
			Several large trees were blown down by strong thunderstorm winds.						
Renville County Renville	25	1500CST			0	0	?	?	Thunderstorm Winds
Fairfax	25	1510CST			0	0	?	?	Thunderstorm Winds
			Numerouse trees and power lines blown down by strong thunderstorm winds.						
Stearns County Sauk Centre	25	1511CST			0	0	?	?	Thunderstorm Winds
			The wall of a school near Sauk Centre was blown down by strong thunderstorm winds.						
Morrison County 1N Little Falls	25	1512CST			0	0	?	?	Thunderstorm Winds
1W Pierz	25	1520CST			0	0	?	?	Thunderstorm Winds
			Strong thunderstorm winds blew down numerous large trees near Little Falls and Pierz.						
Mc Leod County Brownton	25	1524CST			0	0	0	0	Hail (0.75)
Stearns County Waite Park	25	1525CST			0	0	?	?	Thunderstorm Winds

Storm Data and Unusual Weather Phenomena

August 1994

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage Property	Crops	Character of Storm
St Cloud	25	1529CST			0	0	0	0	Thunderstorm Winds (G56)
Mc Leod County Winsted	25	1530CST			0	0	?	?	Thunderstorm Winds
			Trees and power lines blown down by strong thunderstorm winds.						
Benton County Sauk Rapids	25	1530CST			0	0	?	?	Hail (0.75)
MINNESOTA Cont'd									
Sibley County Winthrop	25	1534CST			0	0	?	?	Thunderstorm Winds Hail (0.75)
			Four grain bins toppled by strong winds.						
Benton County Rice	25	1536CST			0	0	?	?	Thunderstorm Winds
			Numerous power lines were blown down.						
Sherburne County Elk River	25	1545CST			0	0	?	?	Thunderstorm Winds
			Strong thunderstorm winds demolished a barn.						
Morrison County Hillman	25	1545CST			0	0	?	?	Thunderstorm Winds
			Trees and power lines blown down.						
Todd County Osakis	25	1548CST			0	0	?	?	Thunderstorm Winds
			Trees and power lines were blown down.						
Mille Lacs County Princeton	25	1553CST			0	1	?	?	Thunderstorm Winds
			A roof was blown from a building and a tree was blown onto a car and injured a woman.						
Sibley County Gibbon	25	1555CST			0	0	?	?	Thunderstorm Winds
			Numerous trees and power lines blown down.						
Wright County Buffalo	25	1556CST			0	0	?	?	Thunderstorm Winds
			Trees and power lines blown down.						
Isanti County Crown	25	1610CST			0	0	?	?	Thunderstorm Winds
			Two barns blown down by strong thunderstorm winds.						
Anoka County Ramsey	25	1615CST			0	0	?	?	Thunderstorm Winds
			Roof blown off pole barn.						
Ham Lake	25	1620CST			0	0	?	?	Thunderstorm Winds
			A trailer home was lifted from its foundation.						
Isanti County Cambridge	25	1620CST			0	0	?	?	Thunderstorm Winds (G73)
Sherburne County Elk River	25	1620CST			0	0	?	?	Thunderstorm Winds
			A large tree was blown throw the picture window of a home.						
Kanabec County 1W Mora	25	1630CST			0	0	5K	1K	Thunderstorm Winds (G60)

Storm Data and Unusual Weather Phenomena

August 1994									
Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
Anoka County Anoka	25	1635CST			0	0	?	?	Thunderstorm Winds
Several buildings were damaged by strong winds.									
Brown County Comfrey	25	1645CST			0	0	?	0	Hail (1.00)
Quarter size hail fell in Comfrey.									
Pine County 4E Pine City	25	1655CST			0	0	?	?	Thunderstorm Winds (G75)
MINNESOTA Cont'd									
Several large trees and power lines were blown down in southern Pine Co. A silo and shed were also blown down 4E of Pine City.									
Chisago County North Branch	25	1700CST			0	0	?	?	Thunderstorm Winds
Trees and power lines were blown down.									
Washington County Scandia	25	1700CST			0	0	?	?	Thunderstorm Winds
A barn was destroyed and numerous trees were blown down by strong winds.									
Nicollet County 5N St. Peter	25	1710CST			0	0	?	0	Thunderstorm Winds
Strong winds blew down trees 5 miles north of St. Peter.									
Koochiching County Northome	27	0737CST			0	0	0	?	Hail (1.75)
Itasca County 1W Effie	27	0745CST			0	0	?	?	Hail (0.75)
Roseau County 2N Pinecreek	27	0750CST	Short	Narrow	0	0	?	?	Tornado (F0)
A small airplane flipped over shortly after landing. Nobody injured, but plane was a total loss . Gutters on many of the buildings at the airport were ripped off. Small storage shed totally destroyed. A detached garage was blown off its foundation. Numerous adult trees were blown down and a U.S. Customs communications tower was toppled onto power lines resulting in power outages.									
3SW Warroad	27	0805CST			0	0	0	?	Thunderstorm Winds
Severe thunderstorm winds downed numerous trees at the Lakewood Trailer Park.									
1W Warroad	27	0807CST			0	0	0	?	Thunderstorm Winds
Severe thunderstorm winds downed numerous trees.									
Warroad	27	0810CST			0	0	?	?	Thunderstorm Winds
Numerous trees down in the Warroad area; winds were estimated by a law enforcement official to be 80 mph. A few railroad crossing arms were completely blown off.									
Lake of Woods 10NE Warroad	27	0812CST	Short	Narrow	0	0	0	?	Tornado (F0)
Reports from resort operators of a tornado west of Long Point on the south shore of Lake of the Woods.									
Roseau County 1N Swift	27	0820CST			0	0	?	?	Thunderstorm Winds
A trailer home was flipped over. No dollar estimate available.									
Mille Lacs County Milaca	27	0906CST			0	0	?	?	Hail (1.75)
An estimated 1500 cars were damaged by large hail.									
St. Louis County 5N Island Lake	27	0925CST			0	0	?	?	Hail (1.75)

Storm Data and Unusual Weather Phenomena

August 1994									
Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
Crow Wing County 1W Garrison	27	0935CST			0	0	?	?	Hail (1.00)
Koochiching County International Falls	27	0944CST			0	0	0	?	Hail (0.75)
St. Louis County 5W Lakewood	27	0945CST			0	0	?	?	Hail (1.75)
MINNESOTA Cont'd									
Koochiching County 2S International Falls	27	0948CST			0	0	0	?	Hail (1.00)
Quarter size hail at WSO International Falls.									
St. Louis County 2N Duluth	27	0950CST			0	0	?	?	Hail (2.50)
Tennis ball size hail fell along Highway 61 north of Duluth. Four cars were severely damaged.									
Koochiching County 3NE International Falls	27	0952CST			0	0	0	?	Hail (1.25)
Ping pong ball size hail near the town of Ranier. Hail was completely covering the ground.									
8E International Falls	27	1010CST			0	0	0	0	Hail (0.75)
Dime size hail at the Voyageurs National Park Visitors Center.									
MISSISSIPPI									
Harrison County Biloxi	5	1617CST			0	0	3	0	Flash Flood
Six inches of rain in Biloxi caused street flooding. A couple of homes had up to 2 feet of water in them. Edgewater Mall Closed for a short time due to flooding.									
Yazoo County 3 S Yazoo City	19	0830CST			0	0	2	0	Thunderstorm Wind (G48)
One large tree and several smaller trees were blown down by 55 mph thunderstorm winds.									
Harrison County 5 S Gulfport	30	1654CST			0	0	0	0	Waterspout
Two waterspouts were reported in Mississippi Sound just south of Gulfport.									
MISSOURI									
Please refer to the second section of Storm Data and Unusual Weather Phenomena .									
MONTANA									
Flathead County Columbia Falls	03	1700MST			0	0	5	0	High Winds
High winds blew over a drive-in movie screen and totally destroyed it.									
Powder River County 3 N Olive	10	1405MST			0	0	0	5	Hail (1.50)
Hail left a 40 mile long swath of damage to area crops and brought an unknown amount of property damage to sparsely populated area.									
Powder River County Broadus	10	1415MST- 1430MST			0	0	5	0	Thunderstorm Winds

Storm Data and Unusual Weather Phenomena

August 1994

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
Thunderstorm winds blew off section of County Courthouse roof. Damages estimated in excess of \$100,000.									
Powder River County									
5 E Broadus	10	1430MST			0	0	?	?	Hail (1.75)
Blaine County									
4 E Cleveland	10	1400MST- 1415MST			0	0	?	?	Hail (1.75)
Custer County									
23 E Miles City	10	1845MST			0	0	?	?	Hail (2.50)
MONTANA Cont'd									
Flathead County									
NE Portion	14	1645MST			0	0	?	?	Thunderstorm Winds
Park County									
Livingston	15	1532MST			0	0	?	?	Thunderstorm Winds (G58)
Powell County									
Deer Lodge	15	1622MST			0	0	?	?	Hail (1.00)
Fergus County									
8 NE Roy	16	0300MST			0	0	4	0	Thunderstorm Winds
Thunderstorm winds blew off a large section of shed roof.									
Richland County									
Sidney	17	2214MST			0	0	2	0	Thunderstorm Winds
Large tree blown down.									
Jefferson County									
Whitehall	20	1630MST			0	0	4	0	Thunderstorm Winds
Roof of home damaged by wind.									
Rosebud County									
Rock Springs	22	1647MST			0	0	3	0	Thunderstorm Winds (G63)
Powder River County									
5 N Miles City	22	1715MST			0	0	5	0	Thunderstorm Winds
Aircraft hanger and small plane destroyed.									
Powder River County									
14 SE Broadus	22	1745MST			0	0	3	0	Thunderstorm Winds
Eight to ten inch limbs blown over power lines causing power outage.									
Dawson County									
Glendive	22	1815MST- 1855MST			0	0	0	0	High Winds (G60)
MTZALL									
All Month					0	0	?	?	Drought
A combination of low winter snowpack and below normal summer rainfall brought widespread drought conditions to the entire state. Drought emergencies were declared in a number of Montana counties with 83% of the State reported under drought conditions at mid month. The drought adversely affected stream fisheries due to low water levels and high water temperatures, lowered crop yields, and exacerbated wildfires.									
MTZALL									
All Month					0	0	6	?	Wildfire
Drought conditions and "dry lightning" thunderstorms combined to bring widespread wildfires to Montana, especially over the western third of the State. Over fifteen hundred wildfires were estimated to have started in the month of August, resulting in many thousands of acres of timber, grassland, and recreational resource loss. Combined cost of fire suppression and resource loss is in the multiple millions of dollars.									

NEBRASKA

Please refer to the second section of **Storm Data and Unusual Weather Phenomena** for additional information.

Storm Data and Unusual Weather Phenomena

August 1994									
Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage	Crops	Character of Storm
					Killed	Injured	Property		
Greeley County									
Spalding	06	0100CST			0	0	?	?	Hail (1.75)
Perkins County									
Venango	07	1800MST			0	0	?	?	Hail (4.50)
Knox County									
Creighton	07	2020CST			0	0	?	?	Hail (0.75)
Garden County									
6 S Oshkosh	07	1647MST			0	0	?	?	Hail (2.00)
Duel County									
10 E Chappell	07	1743MST			0	0	0	0	Funnel Cloud
NEBRASKA Cont'd									
Adams County									
Hastings	07	2240CST- 2244CST			0	0	?	?	Thunderstorm Winds (G50)
Thunderstorm winds blew over a construction trailer and blew down a tree which downed power lines.									
Clay County									
6 ESE Clay	07	2250CST			0	0	?	?	Thunderstorm Winds (G56)
Center									
Harvard	07	2300CST			0	0	?	?	Thunderstorm Winds (G50)
Thunderstorm winds blew down power lines.									
Fillmore County									
Geneva	07	2315CST			0	0	?	?	Thunderstorm Winds (G50)
Thunderstorm winds blew down large tree limbs.									
Lincoln County									
10 NE Wellfleet	07	1531CST			0	0	?	?	Hail (0.75)
Brady	07	1600CST			0	0	?	?	Hail (1.75)
5 SW Brady	07	1605CST			0	0	?	?	Hail (2.75)
Custer County									
15 W Callaway	07	1620CST			0	0	0	0	Funnel Cloud
12 SW Callaway	07	1622CST			0	0	?	?	Hail (1.00)
10 SW Callaway	07	1625CST			0	0	?	?	Hail (1.50)
9 SW Callaway	07	1630CST			0	0	?	?	Hail (1.00)
Frontier County									
Eustis	09	1635CST			0	0	?	?	Lightning
Lightning hit a building, which resulted in damage to a computer system and radio.									
Dawson County									
Cozad	09	2243CST			0	0	?	?	Thunderstorm Winds (G52)
Dawes County									
2 N Chadron	11	1647MST			0	0	?	?	Hail (0.75)
Cheyenne County									
Potter	12	1700MST			0	0	?	?	Thunderstorm Winds (G55)
Scotts Bluff County									
Scottsbluff	16	1629MST			0	0	0	0	Dry Microburst
A microburst with only light rain showers produced brief gusty winds.									
Gage County									
Beatrice	19	0245CST			0	0	?	?	Thunderstorm Winds (G52)
Strong thunderstorm winds blew down tree limbs.									
Howard County									
Boelus	19	0122CST			0	0	?	?	Thunderstorm Winds (G50)
Dannebrog									
St. Libory									
Hall County									
Cairo	19	0130CST			0	0	?	?	Thunderstorm Winds (G56)
Grand Island									

Storm Data and Unusual Weather Phenomena

August 1994									
Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
Doniphan	19	0135CST			0	0	?	?	Thunderstorm Winds (G50)
Adams County									
4 N Hastings	19	0142CST			0	0	?	?	Thunderstorm Winds (G67)
Hastings	19	0145CST			0	0	?	?	Thunderstorm Winds (G50)
Hamilton County									
Aurora	19	0145CST			0	0	?	?	Thunderstorm Winds (G50)
Clay County									
Sutton	19	0220CST			0	0	?	?	Thunderstorm Winds (G50)
Fillmore County									
Fairmont	19	0228CST			0	0	?	?	Thunderstorm Winds (G50)
NEBRASKA Cont'd									
Geneva	19	0245CST			0	0	?	?	Thunderstorm Winds (G50)
Thunderstorms produced winds of 60 to 80 mph as they moved southeast across central Nebraska on the 19th. Trees were uprooted or blown over in Boelus, Dannebrog, St. Libory, Cairo, Grand Island, Doniphan, Aurora, fairmont, Geneva and Hastings. Some of the trees fell on power lines causing power outages. In Cairo, a building that was under construction was blown down. A mobile home sustained major damage and a large bill board was blown down in Alda. In Grand Island, a grain bin and a garage were destroyed. A considerable amount of roof damage occurred at two businesses and one residence. A wind gust of 77 mph was measured at the Hastings National Weather Service Office. Grain bins were destroyed near Aurora and Shickley. In Sutton, a semi-trailer was overturned, two propane tanks were blown over and windows were blown out of a business. The roof of the court house in Geneva was damaged by thunderstorm winds.									
Custer County									
7 SE Berwyn	22	2350CST			0	0	?	?	Dry Microburst
Winds estimated at near 100 mph destroyed a 500 bushel steel grain bin, put a hole in a garage roof and took numerous large branches out of trees. Very little precipitation and no lightning were reported.									
Lincoln County									
Sutherland	24	1630CST			0	1	?	?	Lightning
Lightning struck a man during football practice.									
Hooker County									
Mullen	24	1710CST			0	0	?	?	Thunderstorm Winds (G50)
Rock County									
Newport	24	1345CST			0	0	?	?	Thunderstorm Winds (G50)
Holt County									
Atkinson	24	1430CST			0	0	?	?	Thunderstorm Winds (G50)
Strong thunderstorm winds started near Newport and extended to around Atkinson. Trees were blown down and large tree limbs were broken.									
Custer County									
Callaway	24	2350CST			0	0	?	?	Lightning
Lighting struck a transformer.									
Cedar County									
2 N Hartington	25	1302CST			0	0	?	?	Thunderstorm Winds (G61)
Furnas County									
4 W Beaver City	25	1740CST			0	0	?	?	Hail (1.75)
Saunders County									
Mead	25	1800CST			0	0	?	?	Thunderstorm Winds (G50)
Prague	25	1810CST			0	0	?	?	Hail (0.88)
Strong thunderstorm winds caused damage to the roof of Mead High School.									
York County									
5 N York	25	1829CST			0	0	?	?	Hail (1.75)
York	25	1846CST			0	0	?	?	Hail (1.75)
Thunderstorm Winds (G57)									
4 NW Waco	25	1847CST			0	0	?	?	Hail (0.75)
6 S Waco	25	1855CST			0	0	?	?	Thunderstorm Winds (G61)

Storm Data and Unusual Weather Phenomena

August 1994									
Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
Douglas County 11 SW Omaha	25	1900CST			0	0	?	0	Lightning
Lightning struck a home near 168th Street and Grover Park Plaza which caused about \$25,000 damage.									
York County York	25	1919CST			0	0	?	?	Hail (1.75)
NEBRASKA Cont'd									
Fillmore County 3 SE Exeter	25	1920CST			0	0	?	?	Hail (2.75) Thunderstorm Winds (G69)
York County 4 E McCool	25	1928CST			0	0	?	?	Thunderstorm Winds (G50)
Junction 9 E McCool	25	1935CST			0	0	?	?	Thunderstorm Winds (G50)
Junction									
Hail, up to golfball-size, battered vehicles in York and caused extensive crop damage in York and Fillmore counties. Crop damage in York County was estimated at over \$3 million. Several businesses in York had windows broken out by hail. Baseball-size hail, driven by 80 mph winds, was propelled through a residence southeast of Exeter. Several farm buildings were destroyed by thunderstorm winds east of McCool Junction.									
Nemaha County 1.5 W Brock	25	1945CST			0	0	?	?	Thunderstorm Winds (G55)
Strong thunderstorm winds blew down power poles. Damaged was estimated near \$30,000.									
Sarpy County 1 NE Gretna	25	1820CST			0	1	0	0	Lightning
Lightning struck a man near 199th Street and Cornhusker Road. The man sustained a concussion.									
Saline County 1 E Friend	25	1929CST			0	0	?	?	Hail (1.75)
12 W Wilbur	25	2010CST			0	0	?	?	Hail (1.75)
Swanton	25	2045CST			0	0	?	?	Hail (1.00)
Hail, up to golfball-size, damaged trees, two grain bins and 48,000 acres of crops.									
Jefferson County Fairbury	25	2205CST			0	0	?	0	Lightning
A lightning strike caused a house fire.									

NEVADA

Please refer to the second section of **Storm Data and Unusual Weather Phenomena**.

NEW HAMPSHIRE

Rockingham County	13	0630EST			0	1	0	0	Lightning
A Londonderry woman received minor injuries when lightning traveled through the ground after striking outside her home.									
Rockingham County	13	Evening			0	0	4	0	Thunderstorm Winds
Thunderstorm winds blew over a 100-foot pine tree on top of a residence and two vehicles at Big Island Pond in Derry. Estimated damage was \$10,000.									
Merrimack County	21	1400EST			1	0	0	0	Thunderstorm Winds
Increasing winds capsized a sailboat during a boat race on Lake Sunnapee, drowning the captain. The winds, estimated at 50 mph, were apparently associated with a thunderstorm gust front. (M590)									

Storm Data and Unusual Weather Phenomena

August 1994

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage	Character of Storm
					Killed	Injured	Property - Crops	
NEW JERSEY, Northern								
Somerset County								
Bridgewater	13	1540EST			0	5	0 0	Lightning
Bergen County								
Mahwah	13	1543EST			0	0	? 0	Thunderstorm Wind
Bergen County								
Ramsey	13	1544EST			0	0	? 0	Lightning
Hackensack								
NEW JERSEY, Northern Cont'd								
Union County								
Plainfield	13	1600EST			0	0	? 0	Thunderstorm Wind
Union County								
Linden	13	1640EST			0	0	? 0	Lightning
Middlesex County	13	1641EST			0	0	? 0	Lightning
Bergen County								
Elmwood Park	13	1748EST			0	0	? 0	Lightning
Englewood								
A hot, moist and unstable airmass covering the area contributed to the formation of thunderstorms. One of these was strong enough to down several trees and power lines. In Bridgewater, a baseball tournament was stopped when a sudden bolt of lightning struck, injuring five men.								
Middlesex County								
Old Bridge	14	1453EST			0	0	? 0	Thunderstorm Wind
A cold front moving through the area produced some isolated thunderstorms. One of these storms generated winds sufficient to down some power lines.								
Hunterdon County								
Readington Twp- S. Tewksbury	17	1515EST	1.5	100	0	0	? 0	Tornado (F1)
A very moist and unstable airmass produced a sort-lived tornado that skipped across Hunterdon County. After its initial touchdown, it remained on the ground for about 1 mile. It then lifted for nearly 5 miles before touching the ground again. It produced another path of damage about 0.5 mile long before it lifted for the final time.								
Bergen County								
Cliffside	17	1900EST			0	0	? 0	Heavy Rain
The roof of an apartment complex collapsed under the weight of accumulated water from the heavy rains this day. No one was injured but several apartments sustained significant damage.								
Bergen County								
Lyndhurst	17	2245EST			0	0	? 0	Lightning
Rutherford								
Bergen County								
Lyndhurst	17	2245EST			0	0	? 0	Thunderstorm Wind
Rutherford								
A very moist and unstable airmass produced some isolated thunderstorms that downed several trees and power lines. In addition, a few homes sustained significant fire damage after being hit by lightning.								
Monmouth County								
Allentown	21	2130EST			0	0	? 0	Thunderstorm Wind
Millstone Twp								
A cold front moving across the area triggered some scattered thunderstorms which downed several trees and power lines.								
NJZ003>006-010> 014 NE New Jersey	22	1000EST- 2300EST			0	0	? ?	Urban Flooding
A strong low pressure center developed off the New Jersey coast. Very heavy rains produced considerable urban flooding throughout the area.								
Warren County								

Storm Data and Unusual Weather Phenomena

August 1994

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
Belvidere	27	1615EST			0	0	?	0	Thunderstorm Wind
Hunterdon County	27	1710EST			0	0	?	0	Thunderstorm Wind
Franklin Twp									
									Moist and unstable air over the region produced some isolated severe thunderstorms that downed several trees and power lines.
Sussex County	28	2215EST			0	0	?	0	Thunderstorm Wind
Ogdensburg									
Sparta									
NEW JERSEY, Northern Cont'd									
									Moist and unstable air over the region produced some isolated severe thunderstorms that downed several trees and power lines.
NEW JERSEY, Southern									
Burlington County	02	1700EST	1.0	100	0	0	?	?	Tornado (F1)
Chesterfield									A rare westward moving tornado was formed from merging thunderstorms in northern Burlington County. The tornado touched down in Chesterfield Township and destroyed a brick barn, uprooted trees, damaged the roof of a home under construction and also damaged a couple of classic autos in a garage.
Mercer County	13	1640EST			0	0	?	?	Thunderstorm Winds
Windsor									A 60-foot tree was uprooted and smashed a parked car in Windsor Township. About 1,000 homes lost power in Mercer County.
Mercer County	14	1430EST			0	0	?	?	Thunderstorm Winds
Ewing									
Hamilton Square									Scattered tree limbs and power lines were knocked down in Ewing and Hamilton Townships.
Gloucester County	14	1530EST			0	0	?	?	Lightning
4 S Paulsboro									A lightning strike overloaded the basement transformer and started a fire in an East Greenwich nursing home. No injuries were reported, but nine elderly persons had to be evacuated.
Salem County	21	1940EST			0	0	?	?	Thunderstorm Winds
Elmer									Trees were knocked down in Elmer.
Mercer County	21	2330EST-			0	0	?	?	Flood/Flash Flood
	22	0630EST							
									Thunderstorms, which dropped about 1.5 inches of rain in one hour over Mercer County, produced urban and small stream flash flooding. The Assunpink Creek reached its flood stage of 7 feet at 1130 pm EST on the 21st, crested at 8.1 feet at 3 am EST on the 22nd and was within its banks by 630 am EST on the 22nd.
Gloucester County	22	0800EST			0	0	?	?	Rain and Wind
3 W Woodbury									A steady soaking rain and northeast winds gusting to 20 mph was enough of a combination to cause the uprooting of a 125 foot tree in West Deptford.
Mercer County	22	1600EST-			0	0	?	?	Flood/Flash Flood
	23	0200EST							
Camden County	22	1600EST-			0	0	?	?	Flood/Flash Flood
		2000EST							
									A rare extratropical cyclone developed along the Middle Atlantic Coast on the 22nd and produced a daylong soaking rain over southern New Jersey. Storm rainfall totals were 3.8 to 4.8 inches over the Assunpink Basin with 1.5 to 3 inches falling over most of the rest of southern New Jersey. While the rain was falling light enough to be absorbed by most streams without much consequence, the

Storm Data and Unusual Weather Phenomena

August 1994

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

heavy rain from the previous night in the Assunpink Basin was too much to handle. The Assunpink River in Trenton reached flood stage of 7 feet at 4 pm EST, crested at 8.5 feet at 9 pm EST and went back to bankfull at 2 am EST on the 23rd. Farther south the Cooper River in Haddonfield reached its flood stage of 2.8 feet at 4 pm EST, crested at 2.86 feet at 5 pm EST and went back within its banks at 8 pm EST that evening. No significant damage or injuries were reported.

NEW JERSEY, Southern Cont'd

Atlantic County Hammonton	27	2305EST	0	0	?	?	Thunderstorm Winds (G59)
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A SKYWARN spotter measured a wind gust to 68 mph in Hammonton.

NJZ015>019	All Season	Record/Excessive Heat
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In spite of an August with seasonal temperatures, the meteorological summer (June, July, August) of 1994 was one of the hottest on record in Southwest New Jersey. At nearby Philadelphia International Airport, summer 1994 was the hottest on record with a mean temperature of 78.4 degrees. This surpassed the previous record of 78.2 degrees set in 1993.

NEW MEXICO

Please refer to the second section of **Storm Data and Unusual Weather Phenomena**.

NEW YORK, Central

Broome County Binghamton	01	1100EST	0	0	3	0	Lightning
Binghamton	01	1105EST	0	0	3	0	Thunderstorm Wind
Delaware County Corbett	01	1220EST	0	2	4	0	Lightning
Dutchess County Poughkeepsie	01	1430EST	0	0	4	0	Thunderstorm Wind
Hopewell Junction	01	1430EST	0	0	3	0	Thunderstorm Wind

Severe thunderstorms resulted in damage across parts of eastern New York as they moved across the area during the afternoon of August 1st. In Binghamton numerous trees and a shed were knocked down by thunderstorm winds while lightning caused transformer fires knocking out power. In Corbett lightning struck a metal plant injuring two workers and damaging electrical equipment. In Poughkeepsie and Hopewell Junction thunderstorm winds downed numerous trees and powerlines and caused extensive damage at a local golf course.

Montgomery County Fonda	02	1500EST- 1600EST	0	0	3	0	Urban Flood
Fonda	02	1524EST	0	0	4	0	Thunderstorm Wind
Saratoga County Ballston Lake	02	1539EST	0	0	3	0	Thunderstorm Wind
Saratoga Springs	02	1550EST	0	1	4	0	Lightning
Madison County Madison	02	1550EST	0	0	0	0	Hail (0.75)
Saratoga County Clifton Park	02	1600EST	0	0	3	0	Thunderstorm Wind
Burnt Hills	02	1605EST	0	0	0	0	Hail (1.75)
Crescent	02	1605EST	0	0	3	0	Thunderstorm Wind
Albany County Cohoes	02	1645EST	0	0	3	0	Thunderstorm Wind
Albany	02	1645EST	0	0	4	0	Thunderstorm Wind
Otsego County Otsego	02	1700EST	0	0	4	0	Lightning
Chenango County Norwich	02	1715EST	0	0	3	0	Thunderstorm Wind
Rensselaer County Troy	02	1730EST	0	0	4	0	Lightning
Troy	02	1730EST	0	0	3	0	Thunderstorm Wind

Storm Data and Unusual Weather Phenomena

August 1994									
Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
Troy	02	1730EST- 1830EST			0	0	4	0	Urban Flood
Rennselaer	02	1730EST			0	0	3	0	Thunderstorm Wind
Rennselaer	02	1745EST			0	0	3	0	Thunderstorm Wind
Cortland County									
Cortland	02	1930EST			0	0	3	0	Lightning

NEW YORK, Central Cont'd

Otsego County									
Middlefield	02	2030EST			0	0	3	0	Lightning
Severe thunderstorms swept across parts of eastern New York ahead of a cold front during the late afternoon and evening hours of August 2nd. Numerous trees and powerlines were downed by thunderstorm winds along with damage from lightning strikes. Among the areas hardest hit were Fonda, Albany, Troy and much of southern Saratoga County. In Saratoga Springs lightning struck a tree limb which fell through the windshield of a car below injuring the driver. In Fonda a trailer was blown onto a home while in Crescent docks were damaged along the Mohawk River.									

St. Lawrence County									
Morristown	04	1643EST			0	0	3	0	Thunderstorm Wind
Black Lake	04	1645EST			0	0	2	0	Thunderstorm Wind
Gouverneur	04	1700EST			0	0	2	0	Thunderstorm Wind
Lisbon	04	1700EST			0	0	2	0	Thunderstorm Wind
Madrid	04	1726EST			0	0	2	0	Thunderstorm Wind
5 E Mount Arab	04	1828EST			0	0	0	0	Hail (0.88)

A cold front moved southeast from Canada into northern New York during the late afternoon and evening hours of August 4th resulting in severe thunderstorms across parts of St. Lawrence County. Thunderstorm winds downed numerous trees in Morristown with scattered reports of trees and powerlines down elsewhere in the county. Nickel-size hail was reported along the west shore of Tupper Lake.

Areawide	06 07	AM AM			0	0	0	?	Record Cold
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Record Cold occurred across parts of eastern New York as record lows were broken on both the 6th and 7th of August. At Albany the temperature dropped to 45 degrees on the 6th of August breaking the previous record of 47 degrees set in 1957, while the temperature dropped to 46 degrees on the 7th of August breaking the previous record of 48 degrees set in 1979. A few places even had frost on the morning of the 6th as Piseco and Saranac Lake dropped to 32 degrees.

Delaware County									
Grand Gorge	13	0315EST			0	0	3	0	Lightning
Albany County									
Guilderland	13	0400EST			0	0	3	0	Thunderstorm Wind
Rensselaer County									
Troy	13	0405EST			0	0	3	0	Thunderstorm Wind
Ulster County									
Rosendale	13	1510EST			0	0	3	0	Thunderstorm Wind
Kingston	13	1517EST			0	0	3	0	Thunderstorm Wind
Dutchess County									
Rhinebeck	13	1525EST			0	0	3	0	Thunderstorm Wind
Staatsburg	13	1530EST			0	0	3	0	Thunderstorm Wind
Millbrook	13	1545EST			0	0	3	0	Thunderstorm Wind

A stationary front which was draped across northern Pennsylvania and southeast New York on the 13th of August was responsible for severe thunderstorms which occurred across parts of eastern New York early that morning and during the afternoon. The first round of thunderstorms occurred during the early morning hours of the 13th of August accompanied by a tremendous number of cloud to ground lightning strikes. Thunderstorm winds downed trees and powerlines in Guilderland and Troy. Later that day a second round of thunderstorms downed trees and powerlines across eastern parts of Ulster County and northern parts of Dutchess County.

Washington County									
Salem	14	1512EST			0	0	3	0	Thunderstorm Wind

Storm Data and Unusual Weather Phenomena

August 1994

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

Thunderstorm winds downed a few trees during the afternoon of the 14th in Salem in Washington County.

Tioga County	18	0200EST- 1045EST			1	0	6	0	Flash Flood
Cortland County	18	0300EST- 1500EST			1	0	5	0	Flash Flood

NEW YORK, Central Cont'd

Otsego County	18	0906EST- 1500EST			0	0	5	0	Flash Flood
Chenango County	18	0948EST- 1245EST			0	0	5	0	Flash Flood
Delaware County	18	0948EST- 1245EST			0	0	4	0	Flash Flood

Flash flooding resulted across parts of the Susquehanna and Western Catskill Regions of New York as the remnants of Tropical Storm Beryl moved across the area on the 18th of August. Extensive damage was reported as many streams and rivers in the area overflowed their banks as 2 to 4 inches of rain fell across the area. Tioga County was hardest hit with \$1.5 million in property and municipal damages, mostly in the Waverly area. A 46-year-old woman was killed in the Town of Tioga as she tried to leave her stranded pickup truck. The woman drowned when she was swept down Mitchell Creek. In Cortland County many streams overflowed their banks and several mudslides were reported with damage to homes. A 2-year-old girl drowned in Deruyter when she fell in the Tioughniog River. In Otsego County damage occurred to roads and private residences in the towns of Butternuts, Gilbertsville and Unadilla. At least 14 homes were damaged in the area. In Butternuts alone seven roads sustained severe damage. In addition State Route 7 was closed for several hours due to washouts. In Chenango County flooding along streams undermined bridges and in Delaware County several roads were washed out as streams overflowed their banks. (F46V)(F02O)

Schenectady County Glenville	20	1600EST			0	0	3	0	Thunderstorm Wind
Saratoga County Malta	20	1600EST			0	0	0	0	Hail (1.50)
Burnt Hills	20	1600EST			0	0	3	0	Thunderstorm Wind

A severe thunderstorm struck southern Saratoga and eastern Schenectady Counties during the afternoon of August 20th resulting in downed trees and powerlines and large hail. The severe thunderstorm left thousands of customers in the area without power.

St. Lawrence County Edwardsville	21	0024EST			0	0	5	0	Lightning
Cortland County Marathon	21	0915EST			0	0	3	0	Thunderstorm Wind
Messengerville	21	0915EST			0	0	3	0	Thunderstorm Wind
Washington County Fort Miller	21	1215EST	1.2	50	0	1	5	0	Tornado(F1)

Isolated severe thunderstorms moved across parts of eastern New York ahead of a cold front on the 21st of August. An F1 tornado skipped 3 times along a 1.2 mile path in Fort Miller where it downed a 60 foot high concrete silo, tore sheet metal from two barns, removed part of the slate roof of a house, toppled a camper trailer and blew windows out of two houses. One man was slightly injured receiving minor cuts from flying glass. In Marathon and Messengerville severe thunderstorm winds downed trees. In Edwardsville lightning was believed to be responsible for a barn fire during an early morning thunderstorm which totally destroyed the storage barn.

Broome County Binghamton	28	1845EST			0	0	2	0	Lightning
Greene County Freehold	28	2200EST			0	0	5	0	Lightning
Dutchess County Fishkill	28	2215EST			0	0	3	0	Thunderstorm Wind

Severe thunderstorm winds downed trees in the Fishkill area late on the 28th of August. Lightning was responsible for damage to a porch in Binghamton and for starting a fire which caused serious damage to a vacant house in Freehold.

Storm Data and Unusual Weather Phenomena

August 1994

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
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NEW YORK, Coastal

Orange County Warwick

01 1930EST 0 0 ? 0 Thunderstorm Wind

A relatively moist and unstable airmass gave rise to several thunderstorms late in the day. One storm produced winds that downed a few trees which in turn downed some power lines.

Kings County Coney Island

05 1000EST 0 7 0 0 Lightning

A lone thunderstorm moved across southern sections of New York City. This storm generated several cloud to ground lightning strikes. At a Coney Island beach, a young girl was struck directly and seriously injured. Several others whom were nearby were slightly injured.

Nassau County Woodmere

05 1445EST 0 0 ? 0 Lightning

Suffolk County S. Hampton

05 1620EST 0 0 ? 0 Thunderstorm Wind

Suffolk County Wading River

05 1620EST 0 0 ? 0 Lightning

A cold front moving across Long Island produced some scattered thunderstorms. One particularly strong storm moved onshore through the Hamptons, downing several trees and power lines. Elsewhere a couple of homes sustained significant fire damage after being hit by lightning.

Richmond County

13 1620EST 0 0 ? 0 Thunderstorm Wind

Kings County

13 1627EST 0 0 ? 0 Thunderstorm Wind

Queens County

13 1640EST 0 0 ? 0 Thunderstorm Wind

Nassau County

13 1645EST 0 0 ? 0 Thunderstorm Wind

Nassau County

13 1645EST 0 0 ? 0 Lightning

Nassau County

Port Wash- ington

13 1815EST 0 0 ? 0 Thunderstorm Wind

Great Neck

A hot, moist and unstable airmass covering the area contributed to the formation of thunderstorms. Some of these produced winds strong enough to down several trees and power lines.

Nassau County Oceanside

14 1530EST 0 0 ? 0 Lightning

A cold front moving through the area produced some isolated thunderstorms. In Oceanside, a lightning strike caused significant damage to a home.

NYZ069>081

SE New York

22 1000EST-
2300EST 0 0 ? ? Urban Flooding

Nassau County

Rockville Centre

22 2000EST 0 0 ? 0 High Winds

Rockland County

Stony Point

22 2000EST 0 0 ? 0 High Winds

Westchester County

Mamaroneck

22 2000EST 0 0 ? 0 High Winds

A strong low pressure center developed off the New Jersey coast. Very heavy rains produced considerable urban flooding throughout the area. As the low continued to develop, winds began to increase during the evening. Several trees and power lines were downed as a result of these strong winds.

NEW YORK, Western

Onondaga County

Camillus

Cayuga County

02 1415EST 0 0 4 0 Thunderstorm Wind

Storm Data and Unusual Weather Phenomena

August 1994

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
Union Springs	02	1500EST			0	0	3	0	Thunderstorm Wind
Monroe County	02	1605EST			0	0	4	0	Flash Flood
Genesee County	02	1703EST			0	0	4	0	Flash Flood
Cattaraugus County									
Allegany St Pk	02	1728EST			0	0	4	0	Thunderstorm Wind

NEW YORK, Western Cont'd

Thunderstorms that formed in warm, moist air produced damaging winds during the afternoon hours. The strong winds downed trees and wires. In addition, the heavy rains from the thunderstorms (three to four inches in some spots) resulted in flash floods and closed roads.

Chautauqua County									
Sinclairville	04	1400EST			0	1	4	0	Thunderstorm Wind
Cattaraugus County									
Machias	04	1513EST			0	0	4	0	Thunderstorm Wind
Niagara County									
Youngstown	04	1515EST			0	0	3	0	Thunderstorm Wind
Cattaraugus County									
South Valley	04	1529EST			0	0	3	0	Thunderstorm Wind
Orleans County									
Ridgeway	04	1545EST			0	0	4	0	Thunderstorm Wind
Jefferson County									
Watertown	04	1700EST			0	0	3	0	Thunderstorm Wind

Thunderstorms ahead of a cold front produced damaging winds which downed trees and power lines. In Sinclairville, one man was injured when a falling tree pinned him in his automobile.

Allegany County	13	2148EST			0	0	4	0	Flash Flood
Cattaraugus County	13	2148EST			0	0	4	0	Flash Flood
Cattaraugus County	14	0140EST			0	0	4	0	Flash Flood
Chautauqua County	14	0310EST			0	0	4	0	Flash Flood

Heavy rains resulted in flash flooding over the western southern tier counties. Many streets and some basements flooded. Roads were closed by flood waters in Andover, Olean and Jamestown.

Chemung County	18	0230EST			0	0	7	0	Flash Flood
Tompkins County	18	0300EST			0	0	5	0	Flash Flood
Steuben County	18	0330EST			0	0	6	0	Flash Flood
Schuyler County	18	0430EST			0	0	5	0	Flash Flood
Cayuga County	18	0445EST			0	0	5	0	Flash Flood
Chemung County	18	0830EST			0	0	5	0	Flash Flood
Schuyler County	18	0930EST			0	0	5	0	Flash Flood
Tompkins County	18	0930EST			0	0	5	0	Flash Flood

Remnants of Tropical Storm Beryl dropped three to four inches of rain over parts of the Central Southern Tier and Eastern Finger Lakes Region. In Chemung County the southern portion of the county was hardest hit. The Town of Southport sustained nearly \$3 million in damages. The towns of Ashland, Elmira, and Elmira Heights were also hard hit. Well over 25 homes and businesses were damaged qualifying for state assistance. There were an estimated 60 - 70 evacuations. In Steuben County the towns of Campbell, Erwin and Hornby were hardest hit. Municipal damages (roads and bridges) were estimated at \$650,000. In Cayuga County several businesses in the Moravia area (in the flood plain of the inlet to Owasco Lake) had two to three feet of water. Damages was also reported to a few roads and 16-18 homes in the extreme southern part of the county. In Tompkins and Schuyler Counties streams were reported out of their banks. Roads and basements were flooded.

Tompkins County									
Dryden	21	0815EST	1.0	100	0	0	5	0	Tornado (F0)

An isolated thunderstorm produced a weak tornado in the town of Dryden along State Routes 13 and 392. A barn collapsed. Several large trees were downed on homes. A large tree fell on a car and destroyed it. Power and telephone lines were taken down. Several buildings sustained light roof damage. Roof shingles were blown off. Eaves were peeled up. Chimneys were damaged. Windows were blown out. About a hundred trees sustained damage.

Ontario County									
Geneva	21	0130EST	2.0	100	0	0	5	0	Tornado (F1)

Storm Data and Unusual Weather Phenomena

August 1994

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<p>An isolated thunderstorm spawned a weak tornado in the City of Geneva near Packwood Road and Route 14. The initial touchdown occurred on the west side of Rte. 14 where trees were downed. As the storm crossed Route 14 it destroyed empty grain elevators. Pieces of the buildings were strewn across fields to the northeast. Further east on Packwood Rd. about a dozen trees were</p>									
NEW YORK, Western Cont'd									
<p>downed. On Town Line Rd to the north of Packwood Rd. there was extensive damage to a stand of trees. Approximately 90% of mature trees in a two acre area were totally destroyed.</p>									
Niagara County Lockport	25	1405EST	2.0	30	0	0	4	0	Tornado (F0)
<p>A tornado touched down in Lockport in Niagara County. The tornado was on the ground only for short lengths along the path. Damage was mainly confined to one property where three large trees were downed and windows were blown out of a garage.</p>									
Chemung County	25	1900EST			0	0	4	0	Flash Flood
<p>Heavy rains resulted in the flooding of several small streams and creeks in the town of Southport and the east side of Elmira. Widespread street flooding was reported.</p>									
Erie County	27	0520EST			0	0	5	4	Flash Flood
<p>Three to four inches of rain fell in less than an hour over the towns of Boston and Eden. The flood waters swamped yards and basements and washed out roads, culverts and crops. Damages were estimated near \$100,000.</p>									
Erie County Clarence	28	1200EST			0	0	4	0	Thunderstorm Wind
Niagara County Lockport	28	1200EST			0	0	4	0	Thunderstorm Wind
Orleans County Shelby	28	1200EST			0	0	4	0	Thunderstorm Wind
Niagara County Lockport	28	1210EST	0.6	10	0	0	4	0	Tornado (F0)
Chautauqua County Cherry Creek	28	1215EST			0	0	4	0	Thunderstorm Wind
Fredonia	28	1215EST			0	0	4	0	Thunderstorm Wind
Stockton	28	1230EST			0	0	4	0	Thunderstorm Wind
Fredonia	28	1230EST	2.0	10	0	2	5	0	Tornado (F1)
Erie County Amherst	28	1230EST	0.3	8	0	0	4	0	Tornado (F0)
Ontario County Clifton Springs	28	1245EST			0	0	4	0	Thunderstorm Wind
Wayne County Sodus	28	1245EST			0	0	4	0	Thunderstorm Wind
Livingston County Dansville	28	1249EST			0	0	4	0	Thunderstorm Wind
Niagara County Lockport	28	1250EST			0	1	4	0	Thunderstorm Wind
Cattaraugus County South Dayton	28	1300EST			0	0	4	0	Thunderstorm Wind
Monroe County Webster	28	1300EST			0	0	4	0	Thunderstorm Wind
Spencerport	28	1300EST			0	0	4	0	Thunderstorm Wind
Erie County Alden	28	1301EST			0	0	4	0	Thunderstorm Wind
Genesee County Darien Center	28	1301EST			0	0	4	0	Thunderstorm Wind
Monroe County Penfield	28	1320EST			0	0	4	0	Thunderstorm Wind
Oswego County Hannibal	28	1325EST			0	0	4	0	Thunderstorm Wind
Cattaraugus County Leon	28	1330EST			0	0	4	0	Thunderstorm Wind
Oswego County Granby Center	28	1350EST			0	0	4	0	Thunderstorm Wind

Storm Data and Unusual Weather Phenomena

August 1994

August 1994									
Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage	Character of Storm	
Killed	Injured	Property	Crops						
Jefferson County									
Adams Center	28	1415EST			0	0	4	0	Thunderstorm Wind
NEW YORK, Western Cont'd									
Oswego County									
Fulton	28	1430EST			0	0	4	0	Thunderstorm Wind
Wyoming County									
Warsaw	28	1450EST			0	0	4	0	Thunderstorm Wind
Erie County									
Alden	28	1534EST			0	0	4	0	Thunderstorm Wind
Allegany County									
Fillmore	28	1540EST			0	0	4	0	Thunderstorm Wind
Wyoming County									
Pike	28	1815EST			0	0	4	0	Thunderstorm Wind
Cayuga County									
Conquest	28	1845EST			0	0	4	0	Thunderstorm Wind
Onondaga County									
Clay	28	1915EST			0	0	4	0	Thunderstorm Wind
Thunderstorms developed in a moist, southwest flow ahead of a cold front. The thunderstorm winds downed trees and power lines resulting in power outages scattered across the region. One man was injured in Lockport, Niagara County, when he was pinned in his automobile by a falling tree. The thunderstorms spawned three separate tornadoes. A weak tornado touched down in Lockport in Niagara County. Damage was mainly confined to trees. One house suffered minor roof damage. A fast moving weak tornado produced intermittent damage in Fredonia. Initial touchdown was at the fair grounds where two were injured by flying debris at the Farm er's Fair. Significant tree damage was done in the college area. A house sustained significant damage to its roof and had several windows broken. A weak tornado made a brief touchdown in the northwest corner of the town of Amherst. With the exception of two windows being blown out of a house, damage was confined to trees and shrubs.									
NORTH CAROLINA									
New Hanover County									
Wrightsville Beach	01	0530EST-0540EST	?	?	?	?	?	?	Waterspouts
Two waterspouts were reported by many witnesses.									
Granville, Stovall, and Oxford Counties									
Vance County	02	2018EST			0	0	0	0	Hail (0.75)
Craven County	02	2045EST			0	0	0	0	Hail (0.88)
New Bern	04	1230EST			?	?	?	?	Hail (0.75)
Jones County	04	1415EST			?	?	2	?	Thunderstorm Winds
Near Comfort	Large limbs down. Awnings blown away on Highway 41.								
Wake County									
RDU Airport	05	1220EST			0	0	0	0	Thunderstorm Winds
Public reported several trees snapped.									
Moore County									
N Portion	05	1340EST			0	0	0	0	Thunderstorm Winds
County sheriff reported trees down near route 27.									
Wake County									
	05	1435EST			0	0	0	0	Thunderstorm Winds
Sheriff's office reported tree and power lines down.									
Pasquotank County									
2 NE Elizabeth City	05	1550EST			?	?	?	?	Hail (0.75)
Camden County									
1 W Belcross	05	1600EST			?	?	?	?	Hail (0.75)

Storm Data and Unusual Weather Phenomena

August 1994									
Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
Pitt County Greenville NORTH CAROLINA Cont'd	05	1605EST			0	0	0	0	Hail (0.88)
Washington County 2 NE Wenona	05	1610EST			?	?	?	?	Thunderstorm Winds
Several trees blown down.									
Lenoir County La Grange	05	1610EST			0	0	0	0	Thunderstorm Winds
Sheriff's office reported power lines down near the town of La Grange.									
Pitt County Greenville	05	1625EST			0	0	0	0	Thunderstorm Winds
Several trees reported down in town of Greenville.									
New Hanover County Wilmington	05	1640EST			?	?	?	?	Lightning
Disabled drawbridge for more than an hour on the Cape Fear River.									
Martin County 2 W Beargrass	05	1645EST			?	?	?	?	Thunderstorm Winds
Several trees and numerous large tree branches were blown down.									
Pender County 12 S Burgaw	05	1645EST			?	?	?	?	Thunderstorm Winds
Six-inch diameter trees blown down near US Highway 117.									
Pender County S Portion	05	1645EST			?	?	?	?	Hail (0.75)
Pamlico County Near Bayboro	05	1647EST			?	?	?	?	Thunderstorm Winds
Trees blown down.									
Tyrrell County Columbia	05	1655EST			?	?	?	?	Hail (0.80)
Beaufort County Aurora	05	1700EST			?	?	?	?	Thunderstorm Winds
Trees blown down.									
Onslow County Sneads Ferry	05	1735EST			?	?	4	?	Lightning
Large brick home damaged. Bricks knocked 25 feet away from the house.									
Tyrrell County 1 W Gum Neck	05	1740EST			?	?	?	?	Thunderstorm Winds
Several large trees were blown down.									
New Hanover County Wilmington	05	1900EST			?	?	4	?	Lightning
Significant damage to a church and its contents.									
Brunswick County Winnabow	05	1900EST			?	?	4	?	Lightning
Significant damage to a home on Potter's Field Road.									
Rowan County Salisbury	05	1900EST			?	?	3	?	Tornado (F0)
Outbuilding demolished and mobile home damaged.									

Storm Data and Unusual Weather Phenomena

August 1994

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
NORTH CAROLINA Cont'd									
Cumberland County	11	1410EST			0	0	0	0	Thunderstorm Winds
									Several trees down.
Cleveland County Earl	16	1730EST	2.0	200	0	0	5	0	Tornado (F1)
									At approximately 630 PM EDT, a tornado touched down in southern Cleveland County near the town of Earl, which is south of Shelby. The tornado affected areas off of route 18. One mobile home was completely destroyed on John Crawford Road. Extensive damage was done to a home off Mt. Sinai road. Several trees and power lines were also downed.
Franklin County	16	1735EST			0	1	3	0	Thunderstorm Winds
									A woman was injured by flying glass when a window was blown in. Minor damage was reported at a packhouse.
Iredell County Statesville	16	1808EST			?	?	?	?	Thunderstorm Winds
									Strong thunderstorms winds downed several trees.
Rutherford County Rutherfordton	16	1825EST			?	?	?	?	Thunderstorm Winds
									Trees and power lines were blown down. One mobile home was blown onto its side.
Forsyth County Clemmons	16	1829EST			?	?	?	?	Hail (.75)
Caldwell County Dudley Shoals	16	1842EST			?	?	4	?	Tornado (F0)
Grace Chapel Kings Creek									A weak tornado produced sporadic damage in several adjacent communities. A couple of garages and one barn were damaged. A few homes received roof damage and several mobile homes were moved off their foundations. Tree and power line damage were widespread.
Catawba County NE Hickory	16	1845EST	1.5	200	0	1	5	0	Tornado (F2)
									At approximately 745 PM EDT, a tornado touched down in northern Catawba county, just northeast of the town of Hickory. Extensive damage was reported in the residential communities of Sand y Ridge and Kool Park. Two mobile homes and one home were completely destroyed. Flying debris caused extensive damage to cars and trucks. Several roofs and chimneys were damaged. Several trailers were overturned.
Wilkes County Lomax Austin Sheppards Crossroads	16	1915EST			0	0	4	?	Tornado (F0)
									A weak tornado produced sporadic damage in several adjacent communities. An old store was destroyed, several chicken houses were flattened, windows were broken and a few farm buildings were damaged.
Alleghany County Roaring Gap	16	1950EST			?	?	?	?	Thunderstorm Winds
									Strong thunderstorm winds downed several trees.
Ashe, Watauga, Avery, Caldwell, Madison, Yancy, Mitchell, Swain, Haywood, Buncombe, McDowell, Burke, Jackson, Macon, Transylvania, Henderson, Polk, and Rutherford Counties	16 17	1900EST- 1900EST			?	?	6	?	Flood Flash Flood

Storm Data and Unusual Weather Phenomena

August 1994

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

NORTH CAROLINA Cont'd

The remnants of Tropical Storm Beryl dropped from five to nine inches of rain across western North Carolina. The resulting flash floods and rapid rises in main stem rivers caused serious problems. Hundreds of people were forced to evacuate homes and campsites, roads and bridges were washed out, and mud slides destroyed cabins and homes. The high water closed schools and businesses in several counties. A few incidents of motorists being stranded in their cars or washed downstream were documented by local newspapers. No serious injuries were documented.

Iredell County Statesville

17 0000EST 0 0 4 ? Tornado (F0)

Six mobile homes were damaged. A wall was blown down at a home under construction. Trees and power lines were damaged.

Wake County Holly Springs

17 1915EST 0 0 0 0 Thunderstorm Winds (G56)

A home anemometer of a spotter in Holly Springs recorded a wind gust of 56 knots. Two large oak trees were blown down.

Harnett County Buies Creek

17 2010EST 1 50 0 ? 5 0 Tornado (F1)

Harnett county officials reported a tornado touched down near Buies Creek. The Emergency Management Team at the sight reported numerous trees down along with several mobile home s damaged to the point that people were trapped inside.

Guilford County Greensboro

18 1630EST-1830EST 0 0 0 0 Flash Flood

A total of 1.28 inches of rain fell in just 33 minutes. Numerous roads were reported under water and there were 11 reported weather related accidents.

Robeson County Fairmont

19 0200EST ? ? ? ? Flash Flood

Rainfall estimated at more than seven inches in three to four hours blocked off several roads.

Caldwell County Kings Creek Burke County Glen Alpine Wilkes County Wilkesboro

19 1400EST ? ? ? ? Hail (0.75)

19 1405EST ? ? ? ? Hail (0.75)

19 1425EST ? ? ? ? Thunderstorm Winds

Strong thunderstorm winds downed trees. Minor flooding also occurred.

Alexander County Taylorsville Rockingham County Wentworth

19 1425EST ? ? ? ? Hail (0.75)

19 1525EST ? ? ? ? Thunderstorm Winds

Trees were blown down by a strong thunderstorm.

Gaston County Gastonia

19 1605EST ? ? ? ? Thunderstorm Winds

Several trees were blown down in the Camp Rotary area.

Gaston County Stanley

19 1605EST ? ? ? ? Thunderstorm Winds

Trees and power lines down.

Gaston County Catawba Heights Wilkes County N. Wilkesboro

19 1642EST ? ? ? ? Hail (1.00)

19 1915EST ? ? ? ? Hail (1.25)

Storm Data and Unusual Weather Phenomena

August 1994

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

NORTH CAROLINA Cont'd

Surry County Mtn. Park	27	1216EST			?	?	?	?	Hail (1.75)
Wilkes County Moravian Falls	27	1310EST			?	?	?	?	Thunderstorm Winds

Strong thunderstorm winds blew down trees.

Guilford County High Point	27	1445EST			?	?	?	?	Hail (0.75)
Davidson County Wallburg	27	1445EST			?	?	?	?	Thunderstorm Winds

Trees were blown down in Wallburg.

Randolph County Sophia	27	1445EST			?	?	?	?	Thunderstorm Winds
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Power lines were blown down.

Granville County Stovall	27	1535EST			0	0	0	0	Hail (0.75)
Moore County 2 N Robbins	27	1548EST			0	0	0	0	Hail (0.75)
Union County W Portion	27	1605EST			?	?	?	?	Hail (0.75)
Union County Stallings	27	1614EST			?	?	?	?	Hail (1.75)

Golfball sized hail fell in the town of Stallings.

Harnett County Buies Creek Olivia-Mamers	27	1629EST			0	0	0	0	Thunderstorm Winds
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Trees down near Buies Creek and Olivia-Mamers.

Onslow County S Portion	27	1630EST			?	?	?	?	Hail (0.88)
Alexander County SW Portion	27	1715EST			?	?	?	?	Thunderstorm Winds

Strong winds blew down several trees.

Wake County Knightdale	27	1722EST			0	0	0	0	Hail (0.88)
Wayne County Seymour Johnson AFB	27	1730EST			0	0	0	0	Hail (0.75)
Caldwell County Zacks Fork	31	1622EST			?	?	?	?	Hail (1.75)

NORTH DAKOTA

Divide County 60 E Crosby	01	1720CST			?	?	?	?	Hail (1.75)
Divide County 50 N Noonan	01	1735CST			?	?	10K	30K	Hail (1.75)
Burke County 30 NE Noonan	01	1740CST			?	?	?	?	Hail (1.75)
Pierce County Rugby	03	1536CST			?	?	5K	10K	Hail (1.50)
Pierce County Rugby	03	1536CST			?	?	?	?	Thunderstorm Winds (G52)
Ramsey County Devils Lake	03	1555CST			?	?	20K	?	Thunderstorm Winds (G59)

NORTH DAKOTA Cont'd

Storm Data and Unusual Weather Phenomena

August 1994									
Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
Two airplanes were blown into each other and a 60-foot communications tower was destroyed.									
Benson County Esmond	03	1630CST			?	?	?	?	Thunderstorm Winds (G52)
Towner County E of Cando	06	2015CST			?	?	?	?	Hail (2.75)
Towner County 20 S of Egeland	06	2020CST			?	?	?	?	Hail (2.75)
Ramsey County W of Stark- weather	06	2040CST			?	?	?	?	Hail (0.75)
Ramsey County Garske	06	2050CST			?	?	?	?	Hail (1.00)
Benson County Minnewaukan	06	2127CST- 2135CST			?	?	10K	10K	Hail (1.00)
Foster County Glenfield	06	2133CST			?	?	?	?	Hail (0.75)
Griggs County Near Sutton	06	2134CST			?	?	?	?	Hail (1.00)
Nelson County Tolna	06	2145CST			?	?	30K	?	Thunderstorm Winds (G60)
Strong winds blew two mobile homes into each other and also damaged 100 to 150 trees.									
Nelson County Tolna	06	2145CST			?	?	?	?	Hail (0.75)
Benson County Ft. Totten	06	2200CST			?	?	?	?	Hail (4.50)
Ramsey County Devils Lake	06	2203CST			?	?	?	?	Hail (0.75)
Griggs County 40 N Binford	06	2200CST			?	?	?	?	Hail (0.75)
Nelson County Tolna	06	2230CST			?	?	?	?	Thunderstorm Winds (G70)
Trail County Portland	06	2235CST			?	?	?	?	Thunderstorm Winds (G65)
Grand Forks County Northwood	06	2250CST			?	?	3K	?	Thunderstorm Winds
Foster County E of McHenry	06	2250CST- 2305CST			?	?	?	20K	Hail (2.75)
Foster County Glenfield	06	2255CST			?	?	?	?	Hail (2.75)
Burke County Portal	06	2300CST			?	?	?	5K	Hail (0.75)
Trail County Mayville	06	2310CST			?	?	20K	?	Thunderstorm Winds (G70)
A radio station had it's roof partially blown off. Rain then damaged equipment inside.									
Steele County 50 W Hope	06	2320CST			?	?	?	?	Hail (1.75)
Griggs County Cooperstown	06	2330CST			?	?	?	?	Hail (0.75)
McIntosh County S of Wishek	06	2345CST	2	50	?	?	20K	?	Tornado (F0)
Burke County Portal	06	2345CST			?	?	?	20K	Hail (0.75)
Steele County Colgate	07	0000CST			?	?	?	?	Hail 100
Cass County West Fargo	07	0015CST			?	?	20K	?	Thunderstorm Winds (G70)
NORTH DAKOTA Cont'd									

Storm Data and Unusual Weather Phenomena

August 1994								
Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage Property - Crops	Character of Storm
Cass County Horace	07	0045CST			?	?	? ?	Thunderstorm Winds (G55)
Cass County 50 SE Horace	07	0045CST			?	?	? ?	Thunderstorm Winds (G52)
Steele County 70 N Luverne	06	700CST			?	?	? ?	Hail (1.75)
Stutsman County Montpelier	12	1830CST			?	?	? ?	Hail (1.75)
Barnes County 50 NE Hastings	12	1920CST			?	?	? ?	Hail (1.75)
Barnes County Fingal	12	2000CST			?	?	? ?	Hail (1.75)
Mercer County 70 NE Halliday	12	2135CST			?	?	? 5K	Hail (2.75)
Grand Forks County Larimore	12	2210CST			?	?	? ?	Thunderstorm Winds (G58)
Burleigh County 50 N Bismark	12	2305CST			?	?	? ?	Hail(1.50)
Near Bismark	12	2312CST			?	?	? ?	Hail (0.75)
Ransom County Enderlin	16	800CST			?	?	? ?	Hail (1.75)
Cavalier County Langdon	18	1510CST			?	?	20K ?	Hail (2.75)
Foster County 30 NW Carrington	18	1640CST			?	?	? ?	Hail (1.75)
Carrington	18	1648CST			?	?	? ?	Hail (1.00)
Carrington	18	1650CST			?	?	? ?	Hail (2.50)
Carrington	18	1651CST			?	?	? ?	Hail (2.00)
Carrington	18	1700CST			?	2	25K 30K	Hail (2.75)
A severe hailstorm that lasted nearly twenty minutes damaged buildings, homes, and vehicles. The large hail put holes in roofs and broke windows. Fifty percent of the homes in Carrington were damaged. Three golfers were caught in the storm, their injuries ranged from cuts and bruises to a broken hand.								
Cavalier County NE of Langdon	18	1655CST			?	?	? ?	Hail (1.75)
Cavalier County NE Langdon	18	1710CST			?	?	? ?	Hail (1.75)
Foster County 50 SE Carrington	18	1716CST	2	40	?	?	50K 10K	Tornado (F1)
60 SE Carrington	18	1725CST	2	40	?	?	? ?	Tornado (F1)
The path was estimated.								
Pembina County Pembina	18	1730CST			?	?	? ?	Hail (1.75)
Cavalier County 30 S Maida	18	1750CST			?	?	? 10K	Hail (1.75)
Pembina County 70 SE Walhalla	18	1750CST			?	?	? 20K	Thunderstorm Winds (G52)
Stutsman County 20 S Buchanan	18	1751CST			?	?	? ?	Tornado (F1)
Near Buchanan	18	1800CST	2	40	?	?	50K ?	Tornado (F1)
The path was estimated.								
Barnes County Wimbledon	18	1800CST			?	?	? ?	Hail (1.00)
Pembina County Cavalier	18	1800CST			?	?	40K ?	Thunderstorm Winds (G55)

NORTH DAKOTA Cont'd

Stutsman County

Storm Data and Unusual Weather Phenomena

August 1994									
Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
NW of Jamestown Walsh County	18	1802CST			?	?	?	?	Funnel Cloud
Grafton Walsh County	18	1830CST			?	?	?	?	Funnel Cloud
Grafton	18	1830CST			?	?	1.3M 10K Thunderstorm Winds (G70)		
Strong winds caused widespread damage. Uprooted trees fell on and damaged cars. A hangar at the airport was destroyed damaging four airplanes. Other damage occurred to a 70 ft. trailer and to many homes.									
Barnes County									
W of Valley City	18	1845CST			?	?	?	?	Hail (2.75)
30 S Fingal	18	2001CST			?	?	20K	?	Thunderstorm Winds
Grand Forks County									
70 NE Petersburg	18	2020CST			?	?	?	?	Hail (1.50)
Near Larimore	18	2045CST			?	?	?	?	Thunderstorm Winds (G52)
Emerado	18	2045CST			?	1	30K	?	Thunderstorm Winds (G61)
Barnes County									
Fingal	18	2045CST			?	?	5K	?	Tornado (F0)
Grand Forks County									
50 W Arvilla	18	2045CST			?	?	?	?	Hail (1.75)
Grand Forks AFB	18	2045CST			?	?	?	?	Thunderstorm Winds (G61)
80 W Grand Forks	18	2105CST			?	?	?	?	Hail (0.75)
Morton County									
St. Anthony	22	1905CST			?	?	?	?	Hail (1.75)
Burleigh County									
70 SE Lincoln	22	1930CST			?	?	10K	?	Thunderstorm Winds
30 S Menoken	22	2100CST			?	?	5K	?	Thunderstorm Winds (G52)
Ransom County									
70 S Lisbon	23	825CST			?	?	?	?	Hail (1.75)
Ward County									
Kenmare	24	100CST			?	?	30K	10K	Thunderstorm Winds
Burke County									
Near Columbus	25	030CST			?	?	?	?	Hail (1.75)
Ramsey County									
Near Stark- weather	25	400CST			?	?	40K	10K	Thunderstorm Winds (G60)
Richland County									
Lidgerwood	25	1215CST			?	?	?	?	Hail (1.75)
Renville County									
Near Norma	26	2011CST			?	?	?	?	Thunderstorm Winds
Bottineau County									
Lansford	26	2035CST			?	?	?	?	Hail (1.00)
Renville County									
Grano	26	2040CST			?	?	?	?	Tornado (F0)
McHenry County									
Granville	26	2040CST			?	?	?	?	Hail (0.75)
Renville County									
Near Grano	26	2045CST	2	40	?	?	10K	?	Tornado (F0)
The path was estimated.									
Ward County									
Minot AFB	26	2052CST			?	?	?	?	Thunderstorm Winds (G52)
Renville County									
Glenburn	26	2105CST			?	?	?	?	Hail (0.75)
McHenry County									
Granville	26	2130CST	2.5	20	?	?	30K	?	Tornado (F0)
NORTH DAKOTA Cont'd									
Granville	26	2145CST			?	?	?	?	Hail (0.75)

Storm Data and Unusual Weather Phenomena

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage Property	Crops	Character of Storm
					Killed	Injured			
20 NE Velda	26	2145CST			?	?	?	?	Funnel Cloud
Drake	26	2159CST			?	?	?	?	Funnel Cloud
Balfour	26	2200CST			?	?	30K	?	Thunderstorm Winds
Karlsruhe	26	2200CST			?	?	50K	?	Thunderstorm Winds
20 S Karlsruhe	26	2200CST			?	?	10K	?	Hail (1.75)
Anamoose	26	2240CST			?	?	?	?	Hail (1.75)
Cavalier County									
Munich	27	318CST			?	?	?	?	Hail (1.75)
Langdon	27	340CST			?	?	?	?	Thunderstorm Winds (G52)

OHIO

Tuscaraws County N Portion

02 1223EST 0 0 3 0 Thunderstorm Winds
Trees were downed at several locations.

Ross County N of Pleasant Valley

02 1325EST 0 0 3 0 Thunderstorm Winds
Lightning
Trees were downed.

Lucas County N Toledo

02 1340EST 0 0 3 0 Thunderstorm Winds
Large branches were downed.

Noble County County Road 36

02 1346EST 0 0 3 0 Thunderstorm Winds
Trees were downed.

Guernsey County

02 1405EST 0 0 3 0 Thunderstorm Winds
Trees were downed at several locations.

Lucas County Toledo Express Airport

02 1533EST 0 0 0 0 Thunderstorm Winds
Winds were measured at 59 mph.

Huron County New London Monroeville

02 1625EST 0 0 4 0 Thunderstorm Winds
Several trees were downed in Monroeville. Damage was more widespread in New London where trees and limbs were downed, some on power lines, and signs were blown down.

Licking County Granville

02 1810EST-
02040EST 0 1 3 0 Flash Flood
Lightning
Thunderstorm rains in excess of two inches in an hour or so produced flooding of streets and poor drainage areas. Several roads were closed including State Route 661 which had 2-3 feet of water on it. A local man was injured in a metal barn hit by lightning.

Franklin County W Columbus

02 1825EST 0 3 0 0 Lightning
Three people (two students and an adult) were struck by lightning outside a west side school as they stood outdoors near the school because football and cheerleading practice had been cancelled due to the storm.

Trumbull County S Portion

02 1825EST-
02010EST 0 0 3 0 Flash Flood

OHIO Cont'd

Mahoning County

Storm Data and Unusual Weather Phenomena

								August 1994
Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage Property Crops	Character of Storm
					Killed	Injured		
Austintown Youngstown	02	1850EST- 02240EST			0	0	4 0	Flash Flood
Thunderstorm rains averaged 2 to 4 inches in less than 3 hours with a maximum of 4 inches reported in Austintown (Mahoning) and Coalburg (Trumbull). Flooding of streets, small streams and basements was common.								
Delaware County N of Delaware	02	1950EST- 02115EST			0	0	3 0	Flash Flood
Thunderstorm rains were measured at 2.2 inches in less than two hours which produced flooding of streets, small streams, and basements.								
Lorain County Avon Lake	04	1205EST			0	0	3 0	Thunderstorm Winds
Trees were downed.								
Lorain County Wellington N Ridgeville	04	1220EST			0	0	3 0	Thunderstorm Winds
Cuyahoga County Cleveland Strongsville	04	1225EST			0	0	3 0	Thunderstorm Winds
Medina County Brunswick	04	1229EST			0	0	0 0	Thunderstorm Winds
Winds to 60 mph were reported with several trees downed.								
Ashland County Sullivan	04	1241EST			0	0	4 0	Thunderstorm Winds
Trees were downed, some on power lines, with at least one damaging a house.								
Geauga County Chesterland	04	1252EST			0	0	4 0	Thunderstorm Winds
Trees were downed, one on a car.								
Ashtabula County Ashtabula	04	1300EST			0	0	0 0	Thunderstorm Winds
Winds were measured at 70 mph (61 knots).								
Portage County Mantua	04	1305EST			0	0	3 0	Thunderstorm Winds
Trees were downed.								
Logan County Bellefontaine	04	1305EST			0	0	3 0	Thunderstorm Winds
Trees were downed, some on power lines.								
Franklin County Reynoldsburg	04	1340EST			0	0	3 0	Thunderstorm Winds
Trees were downed.								
Madison County Plumwood	04	1450EST			0	0	0 0	Hail (0.75)
Greene County E Portion	04	1515EST			0	0	4 0	Thunderstorm Winds
Trees were downed in several locations including Bellebrook.								
Franklin County Columbus	04	1529EST			0	4	3 0	Thunderstorm Winds
OHIO Cont'd								

OHIO Cont'd

Trees were downed at several locations. Winds were measured at 59 mph at Port Columbus Airport. Four men were injured at an outdoor amphitheater when the tent they occupied was blown over.

Storm Data and Unusual Weather Phenomena

August 1994

August 1994									
Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
Licking County Summit Station	04	1546EST			0	0	0	0	Thunderstorm Winds
			Winds were reported at 60 mph.						
Fairfield County Pickerington	04	1600EST			0	0	3	0	Thunderstorm Winds Hail (0.75)
			Trees were downed and large hail fell.						
Hamilton County Ross Moyne	04	1609EST			0	0	4	0	Thunderstorm Winds
			Trees down, one on a house.						
Clermont County Loveland	04	1631EST			0	0	3	0	Thunderstorm Winds
Miamisville									
Warren County S Portion	04	1639EST			0	0	3	0	Thunderstorm Winds
Fayette County N of Good Hope	04	1643EST			0	0	3	0	Thunderstorm Winds
			Trees downed, some on power lines.						
Athens County Athens	04	1700EST			0	0	3	0	Thunderstorm Winds
			Trees and large limbs were downed in town and on the Ohio University Campus.						
Morgan County 1 N McConnells- ville	04	1705EST			0	0	3	0	Thunderstorm Winds
			Trees were downed near State Route 669.						
Muskingum County E of Zanesville	04	1715EST			0	0	3	0	Thunderstorm Winds
Ross County 1.5 E Chilicothe	04	1730EST			0	0	3	0	Thunderstorm Winds
Massieville									
Guernsey County Pleasant City	04	1802EST			0	0	3	0	Thunderstorm Winds
Quaker City									
Belmont County St. Clairsville	04	1811EST			0	0	3	0	Thunderstorm Winds
Vinton County 7 E Logan	04	1814EST			0	0	3	0	Thunderstorm Winds
Jefferson County S Portion	04	1822EST			0	0	3	0	Thunderstorm Winds
Gallia County State Route 7	04	1830EST			0	0	3	0	Thunderstorm Winds
Between Addison Cheshire									
Columbiana County Salem	12	1401EST			0	0	0	4	Hail (1.00)
			Large hail damaged some crops.						
Ross County Kinnikinnick	12	1548EST			0	0	3	0	Thunderstorm Winds
			Trees were downed, some on power lines.						
OHIO Cont'd									
Ashtabula County Jefferson and Conneaut	12	1748EST			0	0	3	0	Thunderstorm Winds

Storm Data and Unusual Weather Phenomena

August 1994

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
Trees were downed. Several utility poles were blown over at Conneaut.									
Guernsey County Senecaville	12	1850EST			0	0	3	0	Thunderstorm Winds
Trees were downed, some on power lines.									
Erie County	13	0530EST- 1000EST			0	0	4	0	Flash Flood
Huron County	13	0545EST- 1140EST			0	0	5	0	Flash Flood
Several thunderstorms crossed the area during the morning with an average rainfall of 2 to 4 inches. Flooding of streets, small streams, and basements was common.									
Lorain County	13	0545EST- 1340EST			0	0	6	0	Flash Flood
Cuyahoga County	13	0550EST- 1420EST			0	0	6	0	Flash Flood
Lake County	13	0600EST- 1400EST			0	3	6	0	Flash Flood
Geauga County	13	0615EST- 1430EST			0	0	6	0	Flash Flood
Summit County N Portion	13	0615EST- 1440EST			0	0	6	0	Flash Flood
Portage County N Portion	13	0650EST- 1450EST			0	1	6	0	Flash Flood
Trumbull County	13	0710EST- 1450EST			0	0	6	0	Flash Flood
Ashtabula County	13	0710EST- 1300EST			0	0	5	0	Flash Flood
A series of thunderstorms crossed northeast Ohio during the morning hours producing record rainfall. Most areas averaged 4 to 5 inches of rain in less than 6 hours, more than the 100 year rainfall. Several locations reported upwards of 7 inches of rain with a maximum of 7.0 inches in Twinsburg (Summit). Flooding was significant - homes and businesses were flooded and had to be evacuated. Tens of thousands of basements were flooded. Motorists were rescued from stranded vehicles. Many roads were closed including Interstate 77 and some roads and bridges were completely washed away. The Cuyahoga County Fair was cancelled for the first time in 30 years. A local man was injured while rafting in flood waters. Two firemen were injured when their truck fell into a washed out section of road. A Streetsboro (Portage) man was injured by electrical shock while moving a downed antenna during the rain.									
Cuyahoga County Independence	13	0900EST- 2400EST			0	0	6	0	Flood
The Cuyahoga River raged over its banks at Independence and surrounding areas in the valley, exceeding flood stage of 16.0 feet and cresting at 22.9 feet at 13/1315EST. Nearby tributaries also backed up and flooded. Roads, businesses and some homes were flooded and evacuations were necessary.									
Lake County Willoughby	13 14	1300EST- 0200EST			0	0	6	0	Flood
The Chagrin River rose above the 11.0 foot flood stage during a series of heavy thunderstorms and flooded several neighborhoods along the river. A number of families had to be evacuated. Tributaries along the river also experienced flooding and flash flooding farther adding to the damage.									
OHIO Cont'd									
Hancock County Findlay	13	1830EST			0	0	4	0	Thunderstorm Winds
Trees downed, and at least one building suffered roof damage.									

Storm Data and Unusual Weather Phenomena

August 1994									
Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
Hancock County Findlay	13	1840EST- 2000EST			0	0	4	0	Flash Flood
									Thunderstorm rains dropped about 2.5 inches of rain in about an hour produced flooding of streets and small streams. At least four cars were abandoned in flooded streets.
Huron County Norwalk	13	1854EST			0	0	4	0	Thunderstorm Winds
Ashtabula County Ashtabula N Kingsville Conneaut	13	1856EST			0	0	4	0	Thunderstorm Winds
									Trees and large limbs were downed. Hard hit was the west side of Conneaut where several roads were closed from downed trees. Utility poles were also downed along with some signs and awnings.
Lorain County W Portion	13	1915EST			0	0	3	0	Thunderstorm Winds
									Trees were downed in several locations.
Trumbull County Brookfield	13	1915EST	.1	10	0	0	4	0	Tornado (F0)
									A small tornado touched down near a trailer park and was witnessed by several residents. Roof damage occurred to two of the mobile homes and a number of other mobile homes had damage to siding, awnings and skirting.
Medina County S Portion	13	1950EST			0	0	3	0	Thunderstorm Winds
Summit County Richfield	13	2002EST			0	0	3	0	Thunderstorm Winds
Portage County Berlin Lake Area	13	2030EST			0	0	3	0	Thunderstorm Winds
									Trees were downed.
Trumbull County S Portion	13	2035EST			0	0	3	0	Thunderstorm Winds
									Trees were downed in Leavittsburg and other locations. A car was blown off Route 7 at Interstate 80 near Hubbard.
Mahoning County N Portion	13	2100EST			0	0	3	0	Thunderstorm Winds
									Trees were downed at several locations.
Ashtabula County Ashtabula	14	0000EST			0	0	3	0	Thunderstorm Winds
Ashtabula County N Portion	14	0230EST			0	0	3	0	Thunderstorm Winds
									Several trees and large branches were downed.
Wayne County	14	0000EST- 0540EST			0	0	4	0	Flash Flood
Ashland County S Portion	14	0038EST- 0430EST			0	0	3	0	Flash Flood
OHIO Cont'd									
Richland County S Portion	14	0045EST- 0440EST			0	0	3	0	Flash Flood
Stark County	14	0110EST-							

Storm Data and Unusual Weather Phenomena

August 1994									
Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
		0540EST			0	0	4	0	Flash Flood
		Several thundestorms, one after another, produced torrential rains of 2 to 4 inches. Flooding of small streams, streets, and basements was common.							
Franklin County Columbus area	14	0832EST			0	0	4	0	Flash Flood
		Heavy thunderstorm rains averaged 2 to 4 inches with a maximum measured in Westerville of 4.3 inches in about 3 hours. Flooding of streets, small streams, and basements occurred and sveral streets had to be closed.							
Warren County S Portion	14	1445EST			0	0	3	0	Thunderstorm Winds
		Large limbs downed between Loveland and Landen.							
Shelby County Sidney	20	1540EST			0	0	3	0	Thunderstorm Winds
Greene County Bellbrook	20	1555EST			0	0	3	0	Thunderstorm Winds
		Trees were downed.							
Clark County Enon Beach	20	1610EST			0	1	4	0	Thunderstorm Winds
		Trees were downed, some on structures. One person was hospitlized after a large tree fell onto a mobile home. High winds damaged some boats and boat docks.							
Crawford County Galion Crestline	20	1720EST			0	0	4	0	Thunderstorm Winds
		Trees were downed, some on power lines. At least one house and two cars were also damaged from falling trees.							
Richland County Mansfield	20	1746EST			0	0	3	0	Thunderstorm Winds
Holmes County Battle Pass	20	1815EST			0	0	0	4	Hail (0.75)
		Large hail damaged some crops (time of occurence estimated).							
Medina County Brunswick	27	1450EST			0	0	0	0	Hail (1.00)
Pickaway County Orient	27	1805EST			0	0	0	0	Hail (1.00)
Stark County Waynesburg	27	1810EST			0	0	0	0	Hail (1.00)
Carroll County Magnolia Martinsville	27	1820EST			0	1	0	4	Hail (1.00)
		An 11 year old boy was injured when struck by lightning in Martinsville. Large hail damaged some crops in the Magnolia area.							
Ottawa County E Portion	28	1300EST			0	0	3	0	Thunderstorm Winds
		Trees were downed, some on power lines, mainly in the area between sandusky Bay and Lake Erie.							
Ashtabula County Ashtabula	28	1340EST			0	0	4	0	Thunderstorm Winds
OHIO Cont'd									
		Trees and large limbs were downed, some on power lines with at least one building sufferin g damage.							
Cuyahoga County E Portion	28	1340EST			1	0	6	0	Thunderstorm Winds

Storm Data and Unusual Weather Phenomena

August 1994

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
Lake County	28	1346EST			0	0	6	0	Thunderstorm Winds
Geauga County	28	1407EST			0	0	6	0	Thunderstorm Winds
Ashtabula County S Portion	28	1430EST			0	0	5	0	Thunderstorm Winds
Trumbull County Kinsman	28	1440EST			0	0	5	0	Thunderstorm Winds
A large thunderstorm moved across the eastern suburbs of Cleveland to the Pennsylvania border producing winds in excess of 70 mph at times. Winds were measured at 60 mph in downtown Cleveland (Cuyahoga County), 63 mph at Cuyahoga County Airport and 69 mph in Willoughby (Lake). Numerous trees were uprooted, some on power lines, some severely damaging cars and buildings. Many roads were blocked by debris. In Geauga County a greenhouse was destroyed and a trailer overturned. In Kinsman (Trumbull) a pickup truck was crushed by a large falling tree but the driver was unhurt. A 44 year-old Euclid (Cuyahoga) woman was killed near her home as she walked through an area with extensive debris and came into contact with a concealed downed power line. Power was out in some areas for up to 24 hours.									
Auglaize County New Bremen	28	1509EST			0	0	0	0	Hail (0.75)
Shelby County Port Jefferson	28	1520EST			0	0	3	0	Thunderstorm Winds
Trees were downed.									
Logan County Russels Point Degraff	28	1522EST			0	0	3	0	Thunderstorm Winds
Trees were downed in Russels Point and large hail fell in Degraff.									
Union County Marysville	28	1600EST			0	0	3	0	Thunderstorm Winds
Delaware County Ashley	28	1615EST			0	0	3	0	Thunderstorm Winds Hail (1.25)
Large hail fell in Delaware and winds were reported at 75 mph in Ashley. Trees were downed in both locations.									
Franklin County Dublin	28	1630EST			0	0	3	0	Thunderstorm Winds
Stark County	28	1630EST			0	0	3	0	Thunderstorm Winds
Trees were downed, some on power lines, at several locations.									
Marion County New Bloomington and W of Marion	28	1640EST			0	0	3	0	Thunderstorm Winds
Trees were downed, some on power lines.									
Morrow County S Marengo	28	1644EST			0	0	3	0	Thunderstorm Winds
Holmes County	28	1649EST			0	0	3	0	Thunderstorm Winds
Trees were downed at several locations.									
Knox County	28	1650EST			0	0	4	0	Thunderstorm Winds
Trees were downed, some on power lines, at Centerburg, Danville and other locations.									
Licking County S E Croton	28	1650EST			0	0	3	0	Thunderstorm Winds
Trees were downed.									
OHIO Cont'd									
Huron County S of Norwalk	28	1650EST			0	0	3	0	Thunderstorm Winds
Trees were downed in Peru and along State Route 61.									
Stark County	28	1630EST			0	0	3	0	Thunderstorm Winds

Storm Data and Unusual Weather Phenomena

August 1994

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

Trees were downed, some on power lines, at several locations.

Hamilton County Cincinnati Area

28 29	2310EST- 0035EST	0	0	4	0	Flash Flood
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Thunderstorm rains of about 2.5 inches in less than 3 hours produced flooding of streets and basements.

OKLAHOMA

Please refer to the second section of **Storm Data and Unusual Weather Phenomena** for additional information.

OKLAHOMA, Eastern

Washington County

Vera	04	1535CST	0	0	?	?	Thunderstorm Winds (G61)
Rogers County 1 N Oologah	04	1540CST	0	0	?	?	Thunderstorm Winds (G52)
Tulsa County Turley	04	1630CST	0	0	?	?	Hail (0.75)
Okfuskee County Bearden	04	1915CST	0	0	?	?	Thunderstorm Winds
Pittsburg County 1 W Haileyville	04	2025CST- 2055CST	0	0	?	?	Flash Flood

Severe thunderstorms developed in northeast Oklahoma during the afternoon and early evening of August 4th. Several large tree limbs were blown down by strong thunderstorm winds in Bearden, and a few large tree limbs were downed by 70 mile an winds in Vera. Thunderstorm winds gusted to 70 miles an hour just north of Oologah, and dime size hail fell at Turley. Thunderstorms in Pittsburg County produced very heavy rainfall which resulted in flash flooding. Water covered State Highway 63 just west of Haileyville.

Osage County

Shidler	07	0205CST	0	0	?	?	Hail (0.75)
Creek County Near Oilton	07	0245CST	0	0	?	?	Hail (0.75)
Osage County Burbank	07	0520CST	0	0	?	?	Hail (0.88)
Okfuskee County Okemah	07	0630CST	0	0	?	?	Hail (0.75)
Okfuskee County 1 E Cromwell	07	0715CST	0	0	?	?	Hail (0.88)

Severe thunderstorms developed in northeast Oklahoma during the early morning of August 7th and produced large hail. Nickel size hail fell at Burbank and just east of Cromwell, and dime size hail fell at Shidler, at Okemah, and near Oilton.

Osage County

Foraker	19	2150CST	0	0	?	?	Thunderstorm Winds (G63)
Osage County 5 WNW Bowring	19	2151CST	0	0	?	?	Hail (0.75)
Osage County 7 N Pawhuska	19	2233CST	0	0	?	?	Thunderstorm Winds (G61)
Osage County 7 N Pawhuska	19	2233CST	0	0	?	?	Hail (0.88)

OKLAHOMA, Eastern Cont'd

Osage County Wynona	19	2259CST	0	0	?	?	Thunderstorm Winds (G52)
Washington County 6 NW Collinsville	19	2300CST	0	0	?	?	Thunderstorm Winds (G56)
Tulsa County							

Storm Data and Unusual Weather Phenomena

					Number of		Estimated		August 1994
Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Killed	Injured	Property	Crops	Character of Storm
6 NW Collinsville Rogers County	19	2300CST			0	0	?	?	Thunderstorm Winds (G56)
Near Oologah Osage County	19	2320CST			0	0	?	?	Thunderstorm Winds (G56)
7 SW Skiatook Pawnee County	19	2330CST			0	0	?	?	Thunderstorm Winds
Westport	19	2340CST			0	0	?	?	Thunderstorm Winds (G52)

Severe thunderstorms moved across northeast Oklahoma during the late evening of August 19th. A large tree was downed by strong thunderstorm winds at the Zink Ranch 7 miles southwest of Skiatook, and small trees and signs were downed by 65 mile an hour winds near Oologah. Signs were downed by 60 mile an hour winds in Wynona. Thunderstorm winds gusted to 73 miles an hour at the mesonet automated observing site in Foraker and to 70 miles an hour 7 miles north of Pawhuska. Nickel size hail also fell 7 miles north of Pawhuska. Thunderstorm winds gusted to 65 miles an hour along U.S. Highway 75 on the Tulsa/Washington County line 6 miles northwest of Collinsville. Thunderstorm winds gusted to 60 miles an hour at Westport, and dime size hail fell 5 miles west northwest of Bowring.

Nowata County 3.5 WNW Nowata	26	0420CST			0	0	?	?	Thunderstorm Winds
Ottawa County Commerce	26	0420CST			0	0	?	?	Thunderstorm Winds
Nowata County New Alluwe	26	0440CST			0	0	2	?	Thunderstorm Winds
Craig County 4 E New Alluwe	26	0444CST			0	0	3	?	Thunderstorm Winds

Severe thunderstorms developed in northeast Oklahoma during the early morning of August 26th and produced damaging winds. Strong thunderstorm winds blew part of the roof off a mobile home 4 miles east of New Alluwe and blew shingles off houses in New Alluwe. Thunderstorm winds downed trees and power lines in Commerce and downed several large tree limbs 3.5 miles west northwest of Nowata.

OKLAHOMA, Western and Southeastern

Harper County 8 NW Buffalo	01	2030CST			0	0	?	?	Thunderstorm Winds (G61)
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An isolated severe thunderstorm in northwest Oklahoma downed trees and power poles 8 miles northwest of Buffalo.

Payne County Yale	04	1806CST			0	0	?	?	Hail (0.75)
Cushing	04	1815CST			0	0	?	?	Hail (0.75)
Cushing	04	1830CST			0	0	?	?	Thunderstorm Winds

Isolated severe thunderstorms developed across Payne County during the early evening hours of the 4th. The storms produced dime size hail and damaging winds. Severe thunderstorm winds ripped the front door off the Police Department building at Cushing.

Kay County 6 S Hardy	07	0145CST			0	0	?	?	Thunderstorm Winds
8.5 SSE Hardy	07	0145CST			0	0	?	?	Hail (1.00)

Isolated severe thunderstorms in Kay County early on the 7th produced dime size hail 8.5 mile south-southeast of Hardy and downed tree limbs 6 miles south of Hardy.

Lincoln County Davenport	07	0610CST			0	0	?	?	Thunderstorm Winds
3 ENE Sparks	07	0615CST			0	0	?	?	Thunderstorm Winds (G64)

OKLAHOMA, Western and Southeastern Cont'd

Payne County Cushing	07	0615CST			0	0	?	?	Hail (0.75)
Lincoln County 3 ENE Sparks	07	0620CST			0	0	?	?	Thunderstorm Winds (G77)
3 ENE Sparks	07	0625CST			0	0	?	?	Thunderstorm Winds (G53)
3 ENE Sparks	07	0630CST			0	0	?	?	Thunderstorm Winds (G60)

Storm Data and Unusual Weather Phenomena

								August 1994
Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage	Character of Storm
					Killed	Injured	Property Crops	
Prague	07	0630CST			0	0	6 ?	Thunderstorm Winds
Pottawatomie County								
8 N Earlsboro	07	0653CST			0	0	? ?	Thunderstorm Winds (G61)
Seminole County								
4 NW Seminole	07	0705CST			0	0	? ?	Thunderstorm Winds
E Cromwell	07	0715CST			0	0	? ?	Hail (0.88)
Seminole	07	0730CST			0	0	? ?	Thunderstorm Winds
Lincoln County								
Kendrick	07	0753CST			0	0	? ?	Hail (0.88)
S Kendrick	07	0806CST			0	0	? ?	Hail (1.00)
Coal County								
Lehigh	07	0840CST			0	0	? ?	Thunderstorm Winds (G52)
Atoka County								
5 N Atoka	07	0853CST			0	0	? ?	Hail (1.00)
2.5 S Atoka	07	0900CST			0	0	4 ?	Thunderstorm Winds
Tushka	07	0900CST			0	0	? ?	Hail (1.00)
2 SW Atoka	07	0902CST			0	0	3 ?	Thunderstorm Winds
Bryan County								
5 N Bokchito	07	0940CST			0	0	? ?	Hail (1.25)
5 N Bokchito	07	0940CST			0	0	? ?	Thunderstorm Winds
Bokchito	07	0945CST			0	0	? ?	Thunderstorm Winds
8 W Durant	07	1015CST			0	0	? ?	Hail (0.75)
1 E to 0.75	07	1055CST			0	0	3 ?	Thunderstorm Winds
N Liberty								
2 E to 1 N	07	1055CST			0	0	? ?	Thunderstorm Winds
Liberty								
Murray County								
4 W Davis	07	1515CST			0	0	? ?	Hail (0.75)
Carter County								
1 NE Lone Grove	07	1540CST			0	0	? ?	Hail (1.00)
Lone Grove	07	1547CST			0	0	? ?	Hail (0.75)
Love County								
3 W Overbrook	07	1555CST			0	0	? ?	Hail (0.75)
Marietta	07	1613CST			0	0	? ?	Hail (1.00)
Thackerville	07	1700CST			0	0	5 ?	Lightning

Severe thunderstorms moved across portions of central, southern, and southeastern Oklahoma during the morning hours of the 7th, with numerous reports of large hail, winds as high as 90 mph, several areas of wind damage and at least 1 fire started by lightning.

The most significant damage of the day was at Prague, where winds estimated at up to 90 mph caused widespread damage across the community. Civil defense officials estimated the damage in Prague at \$1,000,000. Winds knocked over the steeple at a local church and blew chain-link fences down. Several mobile homes were damaged and at least one was destroyed. Extensive damage was reported at the Prague High School, where a portion of the roof was ripped off by the winds, and the gym suffered significant water damage. The new scoreboard at the high school football field was bent to the ground. No injuries were reported from this storm.

Across southeast Oklahoma, wind damage was reported near Atoka. An auction barn 2.5 miles south of Atoka was severely damaged by strong thunderstorm winds. A quonset-hut type garage was destroyed by thunderstorm winds 2.5 miles southwest of Atoka.

At Lehigh, a mobile home was damaged by severe thunderstorm winds.

Thunderstorm winds also downed trees at Davenport, 2.5 miles south of Atoka, 2 miles southwest of Atoka, at Bokchito and 2 miles east, 1 mile north of Liberty, at Seminole, and 4 miles northwest of Seminole. A tree was blown on top of a house 1 mile east and 3/4 mile north of Liberty. Power

OKLAHOMA, Western and Southeastern Cont'd

poles were damaged or destroyed 2.5 miles south of Atoka, at Bokchito, and 2 miles east, 1 mile north of Liberty.

In Thackerville, lightning struck a power pole, then traveled down the pole into the Thackerville High School, where it started a fire. The resulting fire completely destroyed the school.

Alfalfa County								
8 W Manchester	17	1252CST			0	0	? ?	Hail (0.75)

Storm Data and Unusual Weather Phenomena

August 1994									
Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage	Character of Storm	
					Killed	Injured	Property		Crops
8 W Manchester	17	1252CST			0	0	3	?	Thunderstorm Winds (G61)
Grant County									
4 S 3 W	17	1300CST			0	0	?	?	Thunderstorm Winds
Manchester									
4 S 3 W	17	1330CST			0	0	?	?	Thunderstorm Winds
Manchester									
Garfield County									
Lahoma	17	1345CST			0	0	?	?	Hail (3.00)
Lahoma	17	1345CST			0	3	6	?	Thunderstorm Winds (G95)
Major County									
3 E Meno	17	1345CST			0	0	?	?	Thunderstorm Winds (G76)
3 E Meno	17	1350CST			0	0	?	?	Thunderstorm Winds (G98)
3 E Meno	17	1355CST			0	0	3	?	Thunderstorm Winds (G98)
Garfield County									
Drummond	17	1355CST			0	0	?	?	Hail (3.00)
Drummond	17	1355CST			0	0	5	?	Thunderstorm Winds (G90)
Alfalfa County									
Goltry	17	1400CST			0	0	?	?	Thunderstorm Winds
Garfield County									
Vance AFB	17	1404CST			0	0	?	?	Thunderstorm Winds (G54)
Kingfisher County									
1 SE Kingfisher	17	1430CST			0	0	?	?	Thunderstorm Winds
Dover	17	1430CST			0	0	?	?	Thunderstorm Winds
2.5 WSW to	17	1433CST	2.0	40	0	0	4	?	Tornado (F1)
4.5 SW									
Kingfisher									
5 SW Kingfisher	17	1448CST			0	0	3	?	Hail (4.50 by 6.50)
Okarche	17	1453CST			0	0	?	?	Hail (2.25)
Canadian County									
3.5 SE Okarche	17	1455CST			0	0	4	?	Hail (4.50)
3.5 SE Okarche	17	1455CST			0	0	?	?	Thunderstorm Winds
Okarche	17	1458CST			0	0	?	?	Hail (2.00)
2 E Okarche	17	1500CST			0	0	?	?	Hail (2.50)
Blaine County									
10 E Watonga	17	1520CST			0	0	?	?	Hail (1.25)
10 E Watonga	17	1520CST			0	0	?	?	Thunderstorm Winds (G52)
Oklahoma County									
Wiley Post	17	1532CST			0	0	?	?	Thunderstorm Winds (G52)
Airport									
Canadian County									
3 E Yukon	17	1537CST			0	0	?	?	Hail (0.88)
Grady County									
Minco	17	1539CST			0	0	?	?	Thunderstorm Winds (G52)
Oklahoma County									
Warr Acres	17	1555CST			0	0	?	?	Thunderstorm Winds (G61)
Dewey County									
3 NW Lenora	17	1600CST			0	0	?	?	Hail (0.88)
Canadian County									
11 W 4S El Reno	17	1610CST			0	0	?	?	Hail (0.75)
11 W 4S El Reno	17	1610CST			0	0	?	?	Thunderstorm Winds
Woodward County									
5 E Mutual	17	1630CST			0	0	?	?	Hail (1.25)
Canadian County									
Okarche	17	1645CST			0	0	4	?	Hail (2.75)
OKLAHOMA, Western and Southeastern Cont'd									
Caddo County									
3 N to 3.25	17	1650CST			0	0	?	?	Hail (1.00)
W Anadarko									
3 N to 3.25	17	1650CST			0	0	?	?	Thunderstorm Winds (G52)
W Anadarko									
Pocasset	17	1650CST			0	0	?	?	Hail (0.88)
Dewey County									
Camargo	17	1705CST			0	0	?	?	Hail (0.75)

Storm Data and Unusual Weather Phenomena

August 1994

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
Caddo County									
4 S Anadarko	17	1706CST			0	0	?	?	Hail (0.75)
Grady County									
4 S Norge	17	1710CST			0	0	?	?	Hail (0.75)
Custer County									
11 NW Custer City	17	1715CST			0	0	?	?	Hail (1.00)
Caddo County									
4 S Anadarko	17	1716CST			0	0	?	?	Hail (0.75)
Roger Mills County									
Hammon	17	1720CST			0	0	?	?	Thunderstorm Winds (G65)
Comanche County									
Elgin	17	1728CST			0	0	?	?	Thunderstorm Winds (G52)
Elgin	17	1728CST			0	0	?	?	Thunderstorm Winds (G52)
Grady County									
4 NNW Rush Springs	17	1730CST			0	0	?	?	Thunderstorm Winds
Roger Mills County									
2 WNW Hammon	17	1730CST			0	0	3	?	Thunderstorm Winds (G80)
2 WNW Hammon	17	1730CST			0	0	?	?	Hail (2.00)
Custer County									
2 NW Clinton	17	1744CST			0	0	?	?	Hail (1.00)
Beckham County									
1 W Elk City	17	1804CST			0	0	?	?	Thunderstorm Winds (G65)
Washita County									
5 SW Cordell	17	1805CST			0	0	?	?	Hail (0.88)
5 SW Cordell	17	1805CST			0	0	?	?	Hail (0.88)
Stephens County									
Corum	17	1806CST			0	0	?	?	Thunderstorm Winds
Beckham County									
2 W Elk City	17	1809CST			0	0	3	?	Thunderstorm Winds
Stephens County									
3 SSE Corum	17	1810CST			0	0	?	?	Hail (1.75)
Roger Mills County									
3 SE Herring Station	17	1815CST			0	0	?	?	Thunderstorm Winds (G52)
Cotton County									
Temple	17	1815CST			0	0	?	?	Thunderstorm Winds (G65)
Beckham County									
1.5 N to 0.5 S Carter	17	1816CST	2.0	40	0	0	5	?	Tornado (F1)
Jefferson County									
Addington	17	1820CST			0	0	?	?	Thunderstorm Winds (G68)
Washita County									
Rocky	17	1820CST			0	0	?	?	Hail (0.75)
Beckham County									
5.5 SSW Carter	17	1821CST			0	0	?	4	Hail
Washita County									
2 N Sentinel	17	1830CST			0	0	4	?	Thunderstorm Winds (G74)
Kiowa County									
Hobart Municipi- pal Airport	17	1835CST			0	0	?	?	Thunderstorm Winds (G55)
Dewey County									
Cestos	17	1842CST			0	0	?	?	Thunderstorm Winds (G65)

OKLAHOMA, Western and Southeastern Cont'd

Kiowa County									
Hobart	17	1842CST			0	0	?	?	Thunderstorm Winds (G84)
Dewey County									
Cestos	17	1842CST			0	0	?	?	Thunderstorm Winds (G65)
Major County									
Chester	17	1842CST			0	0	?	?	Thunderstorm Winds (G65)
Greer County									

Storm Data and Unusual Weather Phenomena

August 1994

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
3 SW Willow Beckham County	17	1845CST			0	0	?	?	Thunderstorm Winds (G61)
4 S Delhi Greer County	17	1845CST			0	0	?	?	Thunderstorm Winds
Brinkman	17	1857CST			0	0	5	?	Thunderstorm Winds
Willow	17	1900CST			0	0	?	?	Thunderstorm Winds (G70)
Willow	17	1900CST			0	0	?	?	Hail (1.25)
Kiowa County									
7 NW Mountain Park	17	1900CST			0	0	?	?	Hail (1.00)
Greer County									
Mangum	17	1902CST			0	0	?	?	Thunderstorm Winds (G71)
Mangum	17	1904CST			0	0	4	?	Thunderstorm Winds (G90)
5 SE Mangum Jackson County	17	1915CST			0	0	5	?	Thunderstorm Winds (G57)
Martha	17	1920CST			0	0	?	?	Thunderstorm Winds (G70)
Jefferson County									
4 N Hastings Greer County	17	1920CST			0	0	?	?	Thunderstorm Winds
1 E Mangum Jackson County	17	1935CST			0	0	?	?	Thunderstorm Winds
Duke	17	1935CST			0	0	?	?	Thunderstorm Winds (G70)
Tillman County									
Tipton	17	1935CST			0	0	?	?	Thunderstorm Winds (G71)
4 S Tipton	17	1950CST			0	0	?	?	Thunderstorm Winds (G53)
4 S Tipton	17	2000CST			0	0	?	?	Thunderstorm Winds (G57)
Frederick	17	2010CST			0	0	?	?	Thunderstorm Winds

Thunderstorms which had developed in Kansas during the morning hours of the 17th moved southward into portions of northwest and central Oklahoma during the afternoon hours of the 17th. Thunderstorm outflow from these storms is believed to help enhance the development of a second round of severe thunderstorms which developed in western Oklahoma and moved into north Texas. In Oklahoma these storms produced winds measured up to 113 miles per hour, hail softball to football size, and 2 tornadoes. The severe thunderstorms were located along 2 main paths.

The first area of storms moved into Oklahoma along the Kansas border near Manchester. These storms remained produced damage along a path extending southward to an area between Richland and the area southwest of El Reno in Canadian County.

Of the 500 to 800 permanent homes and businesses that were damaged by the first area of severe thunderstorms, all were damaged by large hail driven by high winds. In virtually every case, damage was on the north side of the buildings. Buildings in several areas received lesser damage on the east side, while very few were damaged on the west side. None were damaged on the south side. Damage consisted of dented or perforated siding (including 3 to 4 inch dents and holes in some cases), or broken windows (hail passed through the walls in some cases). A significant number of permanent homes and businesses examined suffered enough damage to render them temporarily unusable.

Mobile homes suffered far worse damage than did permanent structures in the same area. Those oriented north-south fared much better than those oriented east-west, but in virtually all cases the windward sides were severely dented, and in some cases stripped of siding. Windows and doors on windward sides were shattered. In several cases, hail was driven through the sides and the roof, and accumulated inside the mobile home. It was estimated that less than one-fourth of the 80 to 120 mobile homes that were damaged were liveable immediately afterward, and more than half were damaged beyond repair.

OKLAHOMA, Western and Southeastern Cont'd

Numerous barns, sheds, silos, etc. suffered major damage; several barns were levelled. High winds caused most of the damage.

Several hundred utility poles were downed by the storm.

Windows on several hundred vehicles were shattered by hail, in many cases there was no glass left on the vehicle. Dents on the sides and tops of cars, trucks, RV's, etc. were several inches in diameter in some cases.

Storm Data and Unusual Weather Phenomena

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage Property - Crops	Character of Storm
					Killed	Injured		

August 1994

Damage to trees and shrubs was extensive, especially in the Lahoma and Drummond area where virtually every deciduous tree within miles, and most of the evergreen trees, were stripped of leaves by the hail. There were few uprooted trees; most of the trees that were damaged by wind were either snapped off near the trunk (a few over 3 feet in diameter) or had large branches removed. Lawns and fields in some areas were beaten into a brown-green mulch. There were places along the storm path where no green vegetation could be seen in any direction.

A detailed description of specific damage along selected areas along the storm's path follows:

ALFALFA COUNTY. Winds downed power poles and tore the roof off a barn 8 miles west of Manchester. Trees limbs were downed 4 miles south, 3 miles west of Manchester. Trees were downed at Goltry.

FROM MENO TO LAHOMA TO 5 MILES EAST OF LAHOMA. Widespread damage occurred from 2.5 miles east of Meno to 3 miles east of Lahoma. The storm struck Lahoma between 2:45 PM and 3 PM and was observed as a large cloud of dust approaching from the north. Few, if any, structures in Lahoma were left undamaged, with most damage being in the form of stripped or damaged siding on the north and east sides of buildings. In Lahoma, 102 residences were damaged or destroyed (25 mobile homes and one house destroyed, 5 mobile homes and 25 homes with major damage, and 6 mobile homes and 40 houses with minor damage.) The Lahoma Post Office and the Cimarron School suffered roof damage. Several businesses were damaged, including an RV dealership that lost its entire inventory of RV's and travel trailers, with the loss estimated at \$500,000.

The Oklahoma Mesonet site 2 miles west of Lahoma (3 miles east of Meno) recorded onset of strong winds between 2:40 and 2:45 PM - a five minute peak gust of 86 miles per hour. It then recorded a five minute winds speed of 78 miles per hour and a peak gust of 113 miles per hour, measured by wind instruments approximately 33 feet above the ground. Another peak gust of 113 miles per hour was measured between 2:50 and 2:55 PM, before the wind equipment was damaged. (Based on damage assessment, peak ground-level winds were estimated to be 75 to 100 MPH.)

Several people suffered minor injuries from broken glass, and bruises from hail (the exact number is unknown). Three people were hospitalized, one for a concussion. Several people were treated for hypothermia.

DRUMMOND AREA. Virtually every structure in Drummond suffered damage, mostly to windows, roofs, and siding on the north side. An 80 foot metal storage building was destroyed, exposing farm equipment and other contents. A barn 1/2 mile northeast of Drummond was destroyed, and the debris was deposited 1/2 mile to the south. Ten to 15 mobile homes on the north side of Drummond were destroyed or heavily damaged by hail; all were oriented north-south and suffered major damage on their north sides.

2 MILES SOUTH OF DRUMMOND. Tree and roof damage was found on several homes and outbuildings from 1.5 miles west to 2 miles east of Route 132. In a cemetery 1.5 miles west of Highway 132, several headstones were overturned, possibly by debris impact. The caretakers building was destroyed, and debris was spread 100 yards or more to the south.

EAST OF LACEY. Within a 2 to 3 mile radius of the junction of routes 51 and 132, several large barns were damaged or destroyed and at least three power poles were downed.

DOVER. Tree limbs and many power lines were downed.

THE WEST SIDE OF KINGFISHER. Widespread damage occurred to trees, homes, windows, and outbuildings in and around the Lake Elmer area (4 miles west-northwest of downtown Kingfisher). A barn, with an estimated value of \$80,000, was destroyed, and debris blown for several hundred yards to the south and southwest. Hail ranged from golfball size. One mobile home was destroyed.

OKLAHOMA, Western and Southeastern Cont'd

MEEKER ADDITION, 2.5 MILES SOUTH-SOUTH WEST OF KINGFISHER. Nearly every home was damaged by hail, all on the north side. Most homes also had minor roof damage. A total of 115 homes and eight apartments were damaged. Hail penetrated siding on some homes, leaving holes several inches in diameter. Another 17 homes received similar damage in a subdivision 1 mile northwest of the Meeker Addition. Divots in the ground, and dents or holes in exposed objects, indicate that a few hailstones were baseball size.

2.5 MILES WEST-SOUTHWEST OF KINGFISHER TO 4.5 MILES SOUTHWEST OF KINGFISHER. A small (F1) tornado touched down at 3:33 PM and moved south-southeast for 2

Storm Data and Unusual Weather Phenomena

August 1994									
Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

miles. A 40 foot aluminum trailer, parked east-west, was lifted over a pickup truck parked to its south and dropped on its side 40 to 50 feet to the south. The pickup was rolled about 20 feet to the south and ended up on a pile of bricks and farm accessories, with its nose about 6 to 8 feet off the ground.

Based on eyewitness reports this was probably a gustnado which formed along the leading edge of the storm.

5 MILES SOUTHWEST OF KINGFISHER ALONG HIGHWAY 81. A motorist drove into large hail at this point at 3:48 PM. He suffered extreme hail damage to his vehicle. The windshield and back window were completely broken out, and there was severe damage to the body of the truck. He then continued south on Highway 81 to the Okarche Police Department to warn them of the approaching storm. The policeman who examined the truck reported a hailstone was lying in the bed of the truck which measured 4.5 inches by 6.5 inches and was said to "look like a football".

ALONG HIGHWAY 3, 3.5 MILES SOUTHEAST OF OKARCHE. Between 30 to 40 mobile homes, all oriented east-west, were heavily damaged or destroyed by hail or strong winds estimated at 60 to 90 miles per hour. Eyewitnesses reported hail from baseball to softball size. All mobile homes were damaged on the north and east sides; siding was pounded, and all windows were broken. Roofs were lifted from at least 3 mobile homes, one of which disintegrated in a field 50 to 75 yards south of the mobile home from which it was lifted. One residents dog was beaten to death by the hail, and several chickens and ducks were also killed.

11 MILES WEST, 4 MILES SOUTH OF EL RENO. Severe thunderstorm winds ripped the door off a storm cellar.

Thunderstorm winds also caused other scattered areas of damage. Trees were downed 4 miles north-northwest of Rush Springs, and 4 miles north of Hastings, and trees and power lines were reported downed at Corum.

A second area of thunderstorms developed over portions of Roger Mills County in northwest Oklahoma, and quickly became severe. A mobile home was blown on top of another mobile home 2 miles west-northwest of Hammon. The storms moved into Beckham County and began to produce widespread damage in the Elk City area. Two semis were blown over at a truck stop 2 miles west of Elk City. In the area 3 miles north of I-40 several houses sustained mostly minor roof damage. A house in Erick had a picture window and its framing blown in.

As the center of highest winds then moved toward the city of Carter and strengthened, an F-1 gustnado developed. This gustnado moved from 1.5 miles north of Carter to 0.5 miles south of Carter. One and one-half miles north of Carter several barns were destroyed, and the debris was spread northwestward. A brick home had the east side garage door blown in and the garage roof blown northwestward.

One mile north-northeast of Carter, a well-anchored mobile home was completely destroyed, and the debris spread westward. The straps and concrete anchors were pulled from the ground.

One and one quarter miles northwest of Carter, the tornado moved through a mobile home park where 3 out of 4 mobile homes were completely destroyed. The fourth mobile home received extensive damage but remained standing against the lower portion of several trees. Numerous trees on the south side of the park were completely sheared off 10 to 15 feet above the ground and carried a considerable distance across State Highway 34. The Carter School had extensive roof damage.

Along the rest of the storm path, widespread damage was done by straight-line winds. Five and one-half miles south-southwest of Carter, a barn was destroyed, and a farmer lost 100% of his alfalfa, peanut and watermelon crops. Some fields which were ready for harvest the day before looked as if nothing had ever been planted.

OKLAHOMA, Western and Southeastern Cont'd

The strong winds continued moving into southwest Oklahoma. The area of strongest winds passed 2 to 3 miles west of the cities of Willow, Brinkman, and Mangum, but were still close enough to cause extensive damage.

In Brinkman, 2 grain elevators received major damage.

In Mangum, the entire city received winds of over 80 MPH for 5 to 7 minutes, with gusts in at least 2 areas over 100 MPH.

The first area of damage from winds in excess of 100 MPH in Mangum was about 1 mile long and a few hundred yards wide extending from the fairgrounds on the far northwest side of the city south-

Storm Data and Unusual Weather Phenomena

August 1994

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

southeast to about 1/2 mile north of the downtown area. At the fairgrounds a large span building had most of its roof and 2 walls blown down. Just southeast of this location a small wood frame house, a mobile home and several were completely destroyed. Signs and power poles were blown over. The Mangum Elementary School at the south end of this area of maximum winds had extensive wind damage to the roof and west walls.

The 2nd area of strong winds around Mangum was located on the east side of the city, and was about 2 miles long. At the beginning (north end) of the damage path, several barns and outbuildings were damaged. The middle of this area had major roof and some wall damage to several brick houses. A 450 foot tall cable TV and communication tower located at the south end of this second damage area was toppled. In the area 1 mile east of Mangum, 2 people were trapped inside their truck when trees and power lines fell on top of the truck.

Localized wind damage also continued some distance west of Mangum. A small hay barn 11 miles west of Mangum was blown down.

A summary of damage from this second storm includes at least 8 mobile homes totally destroyed, at least some damage to 70 percent of the approximately 800 homes in Carter, Willow, Brinkman, Mangum, significant roof damage to about 20 businesses, and nearly total destruction of all outbuildings and barns in the direct path of the storms.

The continuous damage path was about 42 miles long and 3 to 8 miles wide. There were no reported injuries with this 2nd area of storms.

Wind damage also occurred in other areas away from this main damage path. Severe thunderstorm winds blew down an 80,000 pound oil drilling rig and truck carrier 2 miles north of Sentinel. Winds from isolated severe thunderstorms produced tree damage 4 miles south of Hastings and 4 miles south of Delhi.

These storms continued their southward movement, where they caused intermittent damage across Jackson County and Tillman County before moving across the Red River into Texas. Power poles were reported downed in Frederick.

Garfield County	19	1640CST			0	0	?	?	Hail (1.25)
Garber	19	1715CST			0	0	?	?	Hail (1.50)
4 E Garber	19	1715CST			0	0	?	?	Thunderstorm Winds (G63)
Noble County	19	1720CST			0	0	?	?	Hail (1.00)
6 S Billings	19	1720CST			0	0	?	?	Thunderstorm Winds (G61)
Major County	19	1840CST			0	0	?	?	Hail (0.88)
5 N Fairview	19	1905CST			0	0	?	?	Hail (0.75)
Kay County	19	1910CST			0	0	?	?	Thunderstorm Winds (G52)
1 N to 3 W	19	2045CST			0	0	?	?	Hail (0.88)
Chilocco	19	2045CST			0	0	?	?	Thunderstorm Winds (G63)
4 W Chilocco	19	2108CST			0	0	4	?	Lightning
Woods County	19	2110CST			0	0	3	?	Thunderstorm Winds
6 NW Alva	19								
6 NW Alva	19								
Garfield County	19	2108CST			0	0	4	?	Lightning
Enid	19	2110CST			0	0	3	?	Thunderstorm Winds
Woods County	19	2110CST			0	0	3	?	Thunderstorm Winds
3 S Alva	19								

OKLAHOMA, Western and Southeastern Cont'd

Garfield County	19	2230CST			0	0	4	?	Lightning
Enid	19								

Severe thunderstorms moved across portions of northern Oklahoma during the afternoon and evening hours of the 19th. These storms produced hail up to 1 1/2 inches in diameter, winds to 72 MPH, and damaging lightning which started at least 2 house fires.

In Alva, a mobile home was blown over by the strong winds.

Lightning struck 2 homes in Enid. During the mid-evening hours, lightning struck a home, and the resulting fire destroyed the home. A second strike occurred about 1 1/2 hours later. Lightning struck a 2nd house, starting a fire which killed a man living inside. The house was valued at \$40,000.

Storm Data and Unusual Weather Phenomena

August 1994

August 1994									
Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
Oklahoma County NW Oklahoma City	20	0020CST			0	0	?	?	Thunderstorm Winds
	A isolated severe thunderstorm struck northwest Oklahoma City. Strong winds from the thunderstorm caused damage to trees and to the roof of a house.								
Logan County Orlando	30	1550CST			0	0	?	?	Thunderstorm Winds (G52)
Garfield County Woodring Airport	30	1605CST			0	0	?	?	Thunderstorm Winds (G55)
Major County Meno	30	1605CST			0	0	?	?	Thunderstorm Winds (G50)
Payne County NE Stillwater	30	1650CST			0	0	?	?	Thunderstorm Winds (G61)
	A few severe thunderstorms across portions of northern and central Oklahoma produced winds up to 71 MPH.								
Seminole County Seminole	31	0430CST			0	0	?	?	Lightning
	Lightning strikes from a thunderstorm over Seminole knocked out power in the area across northwest Seminole, destroyed 2 water meters at 2 homes, and blew a hole in a concrete driveway.								
Love County 2N to 2W Burneyville	31	1325CST			0	0	3	?	Hail (0.75)
	An isolated severe thunderstorm produced dime size hail northwest of Burneyville.								
Pontotoc County 2 S Pickett	31	1340CST			0	0	3	?	Lightning
	Lightning stuck a hay barn, and the resulting fire destroyed the barn.								
OREGON									
Harney County Drewsey	01	1800PST			?	?	?	?	Thunderstorm Winds (G61)
Umatilla County .5 SE Pilot Rock	02	2200PST			?	?	3	?	Thunderstorm Winds (G61)
	Winds associated with a severe thunderstorm damaged the roof, chimney, and TV antenna on a house near Pilot Rock, about 12 miles south of Pendleton.								
Umatilla County 10 E Pendleton Airport	03	1600PST			?	?	?	?	Hail (1.60)
Umatilla County Helix	03	1630PST			?	?	?	?	Hail (0.75)
PENNSYLVANIA, Eastern									
Susquehanna County Dimock	01	1055EST			0	0	?	?	Thunderstorm Winds
	Trees were uprooted, siding was ripped off houses and grape vines were broken in Dimock. Uprooted trees made Pennsylvania State Route 29 impassable.								
Bradford County Rome	02	1545EST			0	0	?	?	Thunderstorm Winds
	Trees were knocked down in Rome.								
Tioga County Middlebury Ctr	02	1627EST			0	0	1.5K .5M		Thunderstorm Winds

Storm Data and Unusual Weather Phenomena

									August 1994
Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property - Crops	Character of Storm	

Trees were uprooted in Middlebury Center.						
Bucks County E Portion	02	1745EST	0	0	?	? Thunderstorm Winds
Downed power lines were reported in eastern parts of Bucks County. This was the same westward moving thunderstorm that dropped a tornado onto neighboring Burlington County New Jersey.						
Dauphin County Harrisburg	04	1626EST	0	0	?	? Thunderstorm Winds (G52)
Measured wind gusts to 60 mph and 58 mph were recorded at the Federal Building in downtown Harrisburg and at Harrisburg International Airport respectively.						
Berks County C Portion	04	1750EST	0	0	?	? Thunderstorm Winds
Topton	04	1810EST	0	0	?	? Thunderstorm Winds
Boyetown	04	1820EST	0	0	?	? Thunderstorm Winds
Severe thunderstorms uprooted trees in Reading and Muhlenberg Township in central Berks County and in Topton and Boyertown in eastern Berks County. Scattered power outages occurred in these areas because of downed trees and power lines with the greatest concentration (730) in Muhlenberg Township.						
Luzerne County Countywide	13	1430EST- 1500EST	0	0	?	? Thunderstorm Winds
6 NW Kyttle	13	1430EST	0	1	?	? Lightning
Plymouth	13	1445EST	2	0	?	? Lightning
Scattered trees were reported uprooted throughout the county. In addition 5,800 homes lost power. Lightning killed two women and injured one man in separate incidents. A 42-year-old man was injured when lightning struck a tent he was hiding in Ricketts Glen State Park. Lightning entered through his right shoulder and exited through his right foot. Farther southeast in Moon Lake Park in Plymouth Township two women were struck and killed by lightning while taking shelter under a pavilion. Lightning also split two of the pavilion's six support posts. One woman was so badly struck that she received third degree burns over 35% of her body, had two quarters fused in her pocket and the zipper to her jeans was melted. (F480)(F500)						
Lackawanna County Scranton	13	1455EST	0	0	?	? Hail (0.75)
Dime-size hail fell on the north side of Scranton.						
Montgomery County Telford	13	1536EST	0	0	?	? Thunderstorm Winds (G57)
Estimated wind gusts to 65 mph were observed in Telford.						
Bucks County Telford	13	1537EST	0	0	?	? Thunderstorm Winds
Chalfont	13	1540EST	0	0	?	? Hail (0.75)
Doylestown	13	1555EST	0	0	?	? Lightning

PENNSYLVANIA, Eastern Cont'd

Downed trees were reported in Telford. Penny-size hail fell in Chalfont. In Doylestown, six residents were evacuated from the Lenape Valley Foundation Sandy Ridge Center after lightning ignited a fire in the building. A separate lightning strike blew up the chimney and siding off a house in Doylestown.

Lancaster County								
N Portion	13	1600EST-						
		1630EST	0	0	?	?	Thunderstorm Winds (G52)	
Rohrerstown	13	1610EST	0	0	?	?	Hail (1.75)	

Severe thunderstorms affected most of northern Lancaster County. Downed trees and power lines were reported in Columbia, Ephrata (Gusts to 60 mph reported), Manheim, New Holland, Salunga and West Hempfield. A downed tree in West Hempfield punched holes in the roof of a house. About

Storm Data and Unusual Weather Phenomena

August 1994

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
1,500 homes lost power. In addition to downed trees, golf ball-size hail fell in Rohrerstown.									
Montgomery County	13	1625EST- 1645EST			0	0	?	?	Thunderstorm Winds (G62)
Severe thunderstorms affected most of Montgomery County and downed what was described as a "countless" number of trees and wires. In western Conshohocken two house frames under construction collapsed. In New Hanover wind gusts to 73 mph were observed along with downed trees. In Souderton a measured wind gust to 58 mph was observed along with marble-size hail. In Upper Merion, a large tent was knocked down at the Valley Forge Convention Center. Thousands were without power. About 25,000 customers throughout the Philadelphia Electric Company (PECO) service area lost power this afternoon, 8,500 still did not have power as of 830 pm EST.									
Chester County 6 E Honey Brook	13	1640EST	0.5	100	0	0	?	?	Tornado (F0)
A weak tornado (F0 on the Fujita Scale) touched down on Barneston Road in Wallace Township. There was no property damage, but numerous trees were uprooted or snapped (up to three feet wide) on Barneston (at least 20), Templin and Indiantown Roads. The tornado was sighted by many individuals in the area. No injuries were reported.									
Chester County 6 E Downingtown 7 NE Downingtown	13	1655EST			0	0	?	?	Thunderstorm Winds
	13	1700EST	0.3	100	0	0	?	?	Tornado (F1)
A severe thunderstorm uprooted trees in West and East Whiteland Townships. As the thunderstorm moved northeast into Charlestown Township, it dropped a F1 (Fujita Scale) tornado on Valley Hill Road. Most of the damage with the second tornado of this day in Chester County was uprooted trees. But, a couple of trees knocked down awnings and a church sign and resulted in minor property damage. Although the tornado lifted in western parts of Charlestown, its parent thunderstorm produced downburst winds which knocked over trees on Pennsylvania State Route 29 in the eastern part of town. No injuries were reported.									
York County SW Portion	14	1300EST- 1310EST			0	0	?	?	Thunderstorm Winds
Severe thunderstorms caused wind related damage in several townships in the southwest section of the county. Trees were knocked down in Glen Rock, Stoverstown and West Manheim Townships. The downed trees resulted in 1,200 Metropolitan Edison Company customers losing power. In Hanover, a trailer was moved one foot off its stand by the wind.									
Chester County N & C Portion	14	1345EST- 1400EST			0	0	?	?	Thunderstorm Winds
Severe thunderstorms produced straight line wind damage across several townships in northern and central Chester County. Several large trees were snapped off or uprooted with downed limbs and wires reported in West Sadsbury Township. Similar wind related damage occurred farther east in East Brandywine, Uwchlan and West Pikeland. The last damage of the afternoon occurred in Westtown. A 200-year-old poplar tree was uprooted and broke windows and the front porch of a house.									
PENNSYLVANIA, Eastern Cont'd									
Lancaster County 3 NE Gap	14	1400EST			0	0	?	?	Thunderstorm Winds
Trees were reported knocked down in Salisbury Township.									
Bucks County 2 N Quakertown C Portion	14	1400EST			0	0	?	?	Thunderstorm Winds
	14	1400EST			0	0	?	?	Thunderstorm Winds
Trees and tree limbs were reported downed in Richlandtown in northern Bucks County and in Buckingham and Upper Makefield Townships in central Bucks County.									
Montgomery County 3 SW Norristown	14	1410EST	1.0	100	0	0	?	?	Tornado (F1)

Storm Data and Unusual Weather Phenomena

August 1994

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
Audubon	14	1410EST			0	0	?	?	Thunderstorm Winds
2 SW Lansdale	14	1420EST			0	0	30K	?	Thunderstorm Winds Lightning
<p>A F1 (Fujita Scale) tornado touched down in the Brandywine Village/Lafayette Park area of Upper Merion Township on Allendale Road just to the north of the Pennsylvania Turnpike (Interstate 276). The tornado sighting was phoned into the National Weather Service by a SKYWARN Spotter. The tornado stayed on the ground for about one mile before lifting around Crossfield Road. Most of the wind damage was downed or snapped (40 to 50) trees. The bulk of the uprooted trees were either in poor health or very old. Two houses were damaged by trees falling on them. The worse one sustained about \$6,000 in damage to its roof, porch, upstairs bathroom and gutters. The tornado touched down within one mile of the King of Prussia Mall. No injuries were reported. This was the 12th confirmed tornado in the Greater Philadelphia Metropolitan Area this year.</p> <p>Elsewhere in Montgomery County damaging winds knocked over a centerfield fence and uprooted between 12 and 18 trees in Upper Gwynedd Township. A lightning strike ignited a fire in an Upper Gwynedd house. It apparently entered through the electrical box and started a fire in the basement. Damage was estimated between \$25,000 and \$30,000. Thunderstorm winds uprooted a large pear tree in Audubon. Frequent lightning resulted in power outages to 55,000 Philadelphia Electric Company (PECO) customers throughout their service area.</p>									
Delaware County NW Portion	14	1430EST			0	0	?	?	Thunderstorm Winds
<p>Numerous trees were snapped or uprooted throughout northwestern Delaware County. The hardest hit areas were Radnor Township with 25 trees damaged and the Easttown area with 18 trees damaged. One of the trees in Easttown landed on an occupied car, but none of its occupants were injured.</p>									
Luzerne County Hunlock Creek	14	1435EST			0	0	?	?	Thunderstorm Winds
<p>Trees were knocked down along U.S. Route 11 in Hunlock Creek.</p>									
Philadelphia County Philadelphia Philadelphia	14	1445EST			0	0	?	?	Thunderstorm Winds
	14	1450EST			0	0	20K	?	Lightning
<p>Damaging wind gusts uprooted trees in the Mount Airy section of Philadelphia. A lightning strike to WPGR-AM's Roxborough transmitter caused \$20,000 in electrical equipment damage. It also knocked down the station's peak transmitted power from 50,000 watts to 1,000 watts.</p>									
Susquehanna County Clifford	14	1530EST	0.1	2	0	0	?	?	Tornado (F0)
<p>A tornado briefly touched down along Pennsylvania State Route 106 in Clifford. There were several eyewitness reports including a SKYWARN Spotter who saw it. A shanty was lifted into a tree. Shingles were torn off one house and a large hay bale was moved over 100 feet. No injuries were reported.</p>									
Bradford County	18	0059EST- 1300EST			0	0	3.9M	?	Flood/Flash Flood
PENNSYLVANIA, Eastern Cont'd									
Lycoming County	18	0130EST- 1500EST			0	0	2.24M	?	Flood/Flash Flood
Tioga County	18	0130EST- 1500EST			1	2	4.1M	?	Flood/Flash Flood
Union County	18	0230EST- 0800EST			0	0	?	?	Flood/Flash Flood
Clinton County	18	0400EST- 0700EST			0	2	?	?	Flood/Flash Flood

The remnants of Tropical Storm Beryl dropped up to 5 inches of rain over north central Pennsylvania and resulted in one death, four injuries and an estimated ten million dollars in damage. Rainfall totals ranged from 2.75 inches at Williamsport to 5.03 inches in Trout Run in Lycoming County, from 2.8 inches in Covington to 4.20 inches in Harrison Park in Tioga County and from 2.25

Storm Data and Unusual Weather Phenomena

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inches in Towanda to 4.28 inches in Bentley Creek in Bradford County. Most other locations in the Susquehanna Valley had storm totals of between 2 and 3 inches of rain with the least amounts over southern areas. Most of the rain fell within a 12 hour period. This, combined with soaking rains on the 13th, left soil moisture levels unusually high for mid-August and exacerbated the flooding problems. States of Emergency were declared in both Bradford and Tioga Counties.

In Bradford County, the most serious flooding was in the western half of the county along Buck and Bentley Creeks. The hardest hit community was Wells Township with Pennsylvania State Route 549 washed out and flood damage to eight businesses and seventeen homes. Other hard hit communities included Athens, Canton, Ridgebury and Troy. About 30 roads were closed because of flooding and/or debris on the road including U.S. 6 and Pennsylvania State Routes 14 and 4028. Thirty of the thirty five persons evacuated in the county were removed from a mobile home park in Ridgebury Township. In Waverly, the Dry Brook Creek flooded the basement of the Village Hall and the Annex Building and caused a major disaster to police equipment and records as well as the village archives. A bridge on Kelly Road in Smithfield Township washed out.

In Lycoming County, the central and western sections were hardest hit with rises along the Lycoming Creek exceeding those during Hurricane Agnes because of the greater concentration of rainfall. Record crests (Gaged since 1979) of 15.1 feet at Camp Susque and 14.5 feet at the number 4 bridge at Hepburnville were recorded. The hardest hit communities included Lycoming (25 dwellings lost), McIntyre (22 dwellings lost), Lewis (15 dwellings lost) and Old Lycoming (13 dwellings lost). Most of the 350 evacuations and rescues occurred along Lycoming Creek in the Antes Addition of Old Lycoming Township. Other evacuations occurred along Larry's Creek in Salladasburg. About 107 adults and 71 children took shelter at Red Cross shelters. Almost every road in the central and western parts of the county were closed. In addition to the damaged dwellings, 80 trailers were damaged or destroyed at the Pine Creek Camping Resort.

Tioga County suffered the greatest damage and the only storm related death. Most roads were flooded (including U.S. Routes 6 and 15) and all major streams flooded including the Tioga and Cowanesque. Covington Township was the hardest hit township as every road in town had flood related damage. About 100 persons were evacuated in Keenyville and Middlebury Center, another 50 persons were evacuated along the Cowanesque River. The worst road damage occurred on Pennsylvania State Route 549 near Daggett as half a mile of the roadway was washed out. Also hard hit was Pennsylvania State Route 328 with two bridges damaged. One of the greatest commercial losses (\$500,000) was afflicted on Ralph's Ford of Richmond Township as the automobile dealer lost 60 cars. There was also damage on the rail line to Corning, New York. A Middlebury Township house burned to the ground (\$90,000) as fire fighters were forced to take 15 miles of detours. About 130 am EST a man and his son were injured in Clymer Township when flood waters on Pennsylvania State Road 349 flipped over their 1993 Ford Pickup three times. At about the same time, a 46-year-old woman's pickup stalled in flood waters while on Barber Hollow Road near Mitchell Creek. She exited the vehicle and attempted to walk home the rest of the way, but the surging flood waters swept her off the road. Her body was found at 7 am EST half a mile downstream from her pickup.

In Clinton County, two boys were rescued from Kettle Creek and treated for exposure. Mud slides closed Pennsylvania State Route 144 just south of Renovo. Flooding was also reported along Young Woman's Creek. A few other rural roads were also closed because of flooding. In Union County, the flooding of Buffalo Run Creek in Mifflinburg closed several roads. Similarly to Clinton County, a few rural roads were also closed because of flooding. Farther south in the Susquehanna Basin, four youths had to be rescued from the swollen, but not flooding, Conewago Creek around noon of

PENNSYLVANIA, Eastern Cont'd

the 18th in York County. (F460)

Lycoming County	18 20	1400EST- 0000EST			0	0	?	?	Flood
Luzerne County	19 21	0300EST- 1700EST			0	0	?	75K	Flood
Northumberland	19	0400EST- 1000EST			0	0	?	?	Flood

The heavy rains from the remnants of Tropical Storm Beryl caused considerable within bankfull rises along the Main Stem and West Branch of the Susquehanna River. In a couple of places, the rivers did exceed their banks. In Luzerne County, there was flood damage to crops at 15 to 20 farms along the Main Stem of the Susquehanna River from Shickshinny to Harding. Plantville was the hardest hit area. Crop damage was estimated at \$75,000.

Storm Data and Unusual Weather Phenomena

August 1994

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
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Along the West Branch, the Susquehanna River reached flood stage (17 feet) in Montgomery (Lycoming County) at 200 pm EST on the 18th. It crested at 20.5 feet at midnight on the 19th and was back to bankfull 24 hours later. The river also reached its flood stage of 19 feet in Milton (Northumberland County) at 4 am EST on the 19th. It crested at 19.25 feet at 715 am EST on the 19th and receded to bankfull at 10 am EST that morning. Although the river crested only one-quarter of a foot above bankfull, it was high enough to close Pennsylvania State Route 405 north of Milton and the Watson River Bridge. Farther downstream, the combination of high water and river debris caused the second worst damage in history to the marina in Shikellamy State Park. Four docks were damaged and several boats that were not removed from the water capsized or were damaged by dock debris.

Clinton County Mackeyville Tamarack

20 1610EST 0 0 ? ? Thunderstorm Winds

A large tree was blown over by a severe thunderstorm on Helpman Road in Mackeyville. A large tree was also blown down across Pennsylvania State Road 144 in Tamarack.

Lancaster County NW Portion

22 0800EST-1530EST 0 0 ? ? Flood/Flash Flood

Two to three inches of rain fell across northwest parts of the county the morning of the 22nd and was enough to send the Little Chickies Creek above flood stage in Mount Joy. The creek crested two feet above flood stage at 9 am EST and forced the closure of two roads. One car became stuck in the flood waters and was abandoned.

Bucks County 3 SE Yardley

22 1610EST 1 0 ? ? Rain/Wind

The combination of an all day rain and northeast winds gusting to around 30 mph toppled a tree onto a road near the River and Ferry Road intersection in Lower Makefield Township. Unfortunately, an automobile driven by a 38-year-old woman was on the road at that time and she was crushed and killed by the falling tree. (F38V)

Bucks County SE Portion

22 1630EST-2330EST 0 0 ? ? Flood/Flash Flood

Storm total rainfall amounts of between 2.8 and 3.8 inches in about 24 hours caused the flooding of the Neshaminy Creek in Langhorne. Flood stage of 9 feet was reached at about 430 pm EST. The creek crested at 10.3 feet at 8 pm EST and was back within bankfull by midnight EST. No significant damage was reported. Farther west between 3.8 and 4.8 inches of rain fell within 24 hours in Berks County, but no significant small stream or urban flooding was reported.

Clinton County Lock Haven Countywide

25 1610EST 0 0 ? ? Hail (0.75)
25 1645EST-1815EST 0 0 ? ? Flood/Flash Flood

PENNSYLVANIA, Eastern Cont'd

Very heavy rain forced the flooding and closure of Pennsylvania State Routes 150 and 664 (Germantown Road).

Union County Weikert

25 1700EST 0 0 ? ? Thunderstorm Winds

Trees were uprooted in Weikert.

Tioga County 8 NE Wellsboro N Portion

25 1815EST 0 0 ? ? Hail (0.75)
25 1830EST-2030EST 0 0 ? ? Flood/Flash Flood

Bradford County NW Portion

25 1854EST-2200EST 0 0 ? ? Flood/Flash Flood

Thunderstorms with very heavy rain (around 2 inches) caused flash flooding of roads and streams in

Storm Data and Unusual Weather Phenomena

August 1994									
Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
Clymer and Lawrence Townships in northern Tioga County and East Smithfield, Ridgebury and Towanda Townships in Bradford County. One family in Ridgebury had to be evacuated. This was the fourth time since Independence Day that flash flooding affected Ridgebury Township.									
Union County W Portion	25	1900EST- 1930EST			0	0	?	?	Flood/Flash Flood
Thunderstorms with heavy rain caused lowland and roadway flooding in the western part of the county.									
Perry County Duncannon	25	1915EST			0	0	?	?	Thunderstorm Winds
Trees were uprooted in Duncannon. About 5,000 Pennsylvania Power and Light customers lost power, mainly in the Newport area.									
Tioga County Lawrenceville	25	1930EST			0	0	?	?	Thunderstorm Winds
Trees were knocked down in Lawrenceville.									
Clinton County	25	1931EST- 2230EST			0	0	?	?	Flood/Flash Flood
Thunderstorms with heavy rain produced drainage flooding throughout the county.									
Tioga County NW Portion	25	2000EST- 2230EST			0	0	?	?	Flood/Flash Flood
Torrential downpours during thunderstorms forced the evacuation of several persons near Sabinsville.									
Cumberland County Newville Middlesex	25	1955EST			0	0	?	?	Thunderstorm Winds
	25	2010EST			0	0	?	?	Thunderstorm Winds
Severe thunderstorms in Newville and Middlesex uprooted trees. One fell on a house in Middlesex.									
Cumberland County	25 26	2200EST- 0100EST			0	0	?	?	Flood/Flash Flood
Thunderstorms with very heavy rain produced significant poor drainage flooding throughout the county.									
York County Chanceford	25	2220EST			0	2	50K	?	Lightning
A lightning induced fire in Chanceford Township almost completely destroyed a trailer. A 34-year-old mother and her four-year-old son were injured in the fire, but survived. The child suffered smoke inhalation and the mother had third degree burns to her feet. Damage to the trailer was estimated at \$40,000 to \$50,000.									
PENNSYLVANIA, Eastern Cont'd									
Tioga County Lawrenceville	27	1340EST			0	2	?	?	Lightning
A 29-year-old man and a 14-year-old child were struck, injured and hospitalized by lightning at a rodeo in Lawrence Township. Two horses were also struck and killed by lightning.									
Luzerne County Mountaintop	27	1450EST			0	0	?	?	Hail (1.00)
Dime- to quarter-size hail fell in Mountaintop. The hail accumulated several inches.									
Wayne County Honesdale	27	1510EST			0	0	?	?	Thunderstorm Winds (G65)
A severe thunderstorm uprooted trees throughout Honesdale and resulted in power outages to 1,500 customers. The worst damage occurred on Court Street when an uprooted tree destroyed a sidewalk, took down a utility pole and damaged the porch and roof of a house across the street. Wind gusts were estimated at 75 mph.									

Storm Data and Unusual Weather Phenomena

									August 1994
Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
Lackawanna County Fleetville	27	1520EST			0	0	?	?	Thunderstorm Winds
Trees and wires were knocked down along Pennsylvania State Route 107 in Fleetville.									
Lycoming County Williamsport	27	1524EST			0	0	?	?	Hail (1.00)
Dime- to quarter-size hail fell in Williamsport. In addition heavy rain, falling at the rate of two inches per hour, delayed the Little League World Series for three hours.									
Northampton County Wind Gap	27	1605EST			0	0	?	?	Thunderstorm Winds
Damaging wind gusts toppled trees and power lines in the Wind Gap and Plainfield areas of northern Northampton County.									
Columbia County Bloomsburg	27	1629EST			0	0	?	?	Hail (1.00)
Union County Lewisburg	27	1630EST			0	0	?	?	Thunderstorm Winds
Trees were uprooted in Lewisburg.									
Northampton County Bethlehem	27	1630EST			0	0	?	?	Thunderstorm Winds
Damaging winds blew down supports to utility poles and consequently wires in Bethlehem and Hellertown. About 16,000 Metropolitan Edison and 2,180 Pennsylvania Power and Light customers lost power around the Allentown Metropolitan Area. Heavy rain also caused the collapse of a roof of a building in Nazareth leaving 21 senior citizens temporarily homeless.									
Columbia County Catawissa	27	1640EST			0	0	?	?	Thunderstorm Winds
5 S Berwick	27	1650EST			0	0	?	?	Thunderstorm Winds
Trees were uprooted in both Beaver Township and Catawissa.									
Chester County 2 N Oxford	27	1815EST			0	7	?	?	Lightning
Seven persons were struck and injured by lightning in Lower Oxford Township while attending a family reunion. Lightning apparently struck a tree and then bounced from it to the party tent under which they were standing.									
Perry County Ickesburg	27	1927EST			0	0	?	?	Thunderstorm Winds
Trees fell onto wires along Boots Hollow Road in Ickesburg.									
PENNSYLVANIA, Eastern Cont'd									
Philadelphia County Philadelphia	27	2130EST			0	0	?	?	Thunderstorm Winds
Large tree limbs were ripped off by the wind in northwestern parts of Philadelphia.									
PAZ037-038-041-042-045-046-049>053	All Month								Excessive Rain
The remnants of Tropical Storm Beryl and thunderstorms with very heavy rain resulted in one of the ten wettest, if not the wettest, August on record in the upper and middle Susquehanna River Basin. The monthly total of 6.65 inches of rain in Williamsport was the 8th wettest August on record.									
PAZ060>062-067>071	All Season								Record/Excessive Heat
In spite of an August with seasonal temperatures, the meteorological summer (June, July, August) of 1994 was the hottest on record at Philadelphia International Airport with a mean temperature of 78.4 degrees. This surpassed the old record of 78.2 degrees set in 1993. By the last news account available, there were 23 heat related deaths in Philadelphia so far this year. Although other seasonal									

Storm Data and Unusual Weather Phenomena

August 1994

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

records were not set across Southeast Pennsylvania, it was one of the ten hottest summers on record in Allentown with a mean temperature of 74.1 degrees.

PENNSYLVANIA, Western Cont'd

Butler County 12S Butler	02	1430EST			0	0	3	0	Flash Flood
A slow moving thunderstorm dumped 4.0 inches of rain in 90 minutes. Several roads had to be closed from flooding. People were stranded on Denny Road where water was up to 3 feet deep. Route 8 was covered in places up to 4 feet deep.									
Allegheny County Countywide	02	1330EST			0	0	0	0	Thunderstorm Winds
Pittsburgh	02	1430EST			0	0	0	0	Flood/Flash Flood
Large branches were downed at several locations across the county. Many streets flooded due to poor drainage.									
Centre County Countywide	02	1600EST			0	0	0	0	Flood/Flash Flood
Small stream flooding was observed.									
Clearfield County Philipsburg	02	1600EST			0	0	0	0	Flood/Flash Flood
Small stream flooding was observed.									
Crawford County Atlantic	02	1617EST			0	0	0	0	Hail (1.75)
Fayette County Labelle	02	1716EST- 1830EST			0	0	4	0	Flash Flood
Four inches of rain in an hour caused rapid flooding of small streams and roads. There were numerous reports of basement flooding.									
Westmoreland County Irwin	02	1730EST			0	0	2	0	Thunderstorm Winds
Trees and powerlines down.									
Mifflin County Lewistown	02	1800EST			0	0	2	0	Thunderstorm Winds
Decatur	02	1815EST			0	0	0	0	Thunderstorm Winds
Large tree branches and wires were downed.									
PENNSYLVANIA, Western Cont'd									
Lawrence County New Castle	02	1920EST			0	0	0	0	Thunderstorm Winds
Franklin County Chambersburg	03	1700EST			0	1	0	0	Lightning
A 16-year-old girl was injured by lightning while standing in the kitchen of her home.									
Erie County Erie	04	1400EST			0	0	3	0	Thunderstorm Winds
Trees were downed, some on power lines.									
Warren County Youngsville	04	1515EST			0	0	4	0	Thunderstorm Winds
A tree fell on a house.									
Beaver County	04	1730EST			0	0	2	0	Thunderstorm Winds
Trees were downed in Daugherty, Center, and Potter Townships.									

Storm Data and Unusual Weather Phenomena

August 1994

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
Greene County									
Waynesburg	04	1845EST			0	0	0	0	Thunderstorm Winds
Bedford County									
Saxton	12	1730EST			0	0	3	0	Lightning
Lightning struck a church bell tower. Damage was estimated at \$3,500.									
Huntingdon County									
Saltillo	12	1730EST			0	0	0	0	Hail (1.00)
Crawford County									
2E Meadville	12	1815EST			0	0	3	0	Thunderstorm Winds
Trees were downed.									
Erie County									
W Springfield	12	1820EST			0	0	3	0	Thunderstorm Winds
Large limbs were downed in Springfield Twp.									
PAZ001>005- 007>010-015	13	0800EST- 1400EST			0	0	0	0	Heavy Rain
Erie, Crawford, Warren, McKean, Mercer, Venango, Forest, Elk, Cameron, and Clarion									
A warm front from western Lake Erie to northern Pennsylvania was the focus for the development of thunderstorms which trained east along the front dumping heavy rain. Twenty-four hour rainfall totals over northwest Pennsylvania ranged from three to seven inches. Observed gage reports from 0800EDT on the 13th to 0800EDT on the 14th: 7.10 inches at Oil City, 5.30 at Franklin, 4.95 at Cooksburg, 4.54 at Greensville, 4.23 at Garland, 3.88 at Erie, 3.81 at Bradford, 3.76 at St. Marys, 3.59 at Spartansburg, and 3.10 at Driftwood.									
Crawford County									
Countywide	13	0720EST- 1400EST			0	0	5	0	Flash Flood
Flooding was widespread. Several roads were closed by small stream and street flooding. A number of basements were also flooded.									
Mercer County									
Countywide	13	1100EST- 1400EST			0	0	5	0	Flash Flood
Flooding was widespread with many streams out of their banks. There were numerous reports of basement flooding.									
PENNSYLVANIA, Western Cont'd									
Venango County									
Countywide	13	1100EST- 1400EST			0	0	5	0	Flash Flood
Sage Run flooded at Oil City flooding basements. Scrubgrass Creek flooded a campground on Rt. 3008. Rock slides closed Routes 3008 and 3005 near Kennerdell.									
Huntingdon County									
Three Springs	13	1700EST			0	0	0	0	Hail (1.00)
Saltillo	13	1700EST- 1900EST			0	0	4	0	Flash Flood
A private road was washed out and several basements were flooded.									
Erie County									
Erie	13	1915EST			0	0	3	0	Thunderstorm Winds
Trees and limbs were downed.									
Mercer County									

Storm Data and Unusual Weather Phenomena

August 1994									
Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
Wheatland	13	1930EST			0	0	2	0	Thunderstorm Winds
									Trees and powerlines were downed in several areas across the southern part of the county.
Venango County Clintonville	13	2030EST			0	0	0	0	Thunderstorm Winds
Erie County Countywide	13 14	2050EST- 0415EST			0	0	4	0	Flash Flood
									Several thunderstorms produced between 2 to 4 inches of rain in several different locations resulting in flooded streets, small streams and some basements. Flooding resulted in an estimated \$35,000 to a water treatment plant.
Venango County Oil City	13 14	2350EST- 0200EST			0	0	0	0	Flood/Flash Flood
									Stream flooding observed.
Erie County Corry	14	0320EST			0	0	3	0	Thunderstorm Winds
									Trees were downed, some on power lines.
Elk County St. Marys	14	0714EST			0	0	4	0	Flood/Flash Flood
									Several roads and basements were flooded.
Elk County Ridgway	14	1100EST- 1400EST			0	0	0	0	Flood
									The Cameron River at Ridgway crested just above its 16-foot flood stage.
Cameron County Countywide	18	0001EST			0	0	0	0	Flood/Flash Flood
									Small stream flooding was observed.
Potter County Countywide	18	0030EST			0	0	4	0	Flash Flood
									Several cars and homes were flooded due to stream flooding.
Clearfield County Countywide	18	0300EST			0	0	0	0	Flood/Flash Flood
PENNSYLVANIA, Western Cont'd									
									Small stream flooding was observed.
Centre County Countywide	18	0330EST			0	0	0	0	Flood/Flash Flood
									Small stream flooding was observed.
Clinton County Countywide	18	0400EST			0	2	5	0	Flash Flood
									Route 144 in South Renovo was closed due to high water and a mud slide. Low lying areas at Renovo, Kettle Creek and the Ole Bull State Park were evacuated. South Renovo Borough was out of drinking water for a time due to damage to a reservoir. Two boys were rescued from Kettle Creek and treated for exposure.
Cameron County Driftwood	18	0801EST			0	0	0	0	Flood/Flash Flood
									Route 120E at Sterling Run near the Driftwood Branch of the Sinnemahoning Creek was closed due to flooding.

Storm Data and Unusual Weather Phenomena

August 1994									
Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
Centre County									
Howard	20	1600EST			0	0	2	0	Thunderstorm Winds
									Trees and wires were downed across Route 26 near the Bald Eagle State Park.
Clinton County									
Tamarack	20	1610EST			0	0	0	0	Thunderstorm Winds
									A tree fell across Route 144.
Potter County									
Galeton	20	1615EST			0	0	0	0	Thunderstorm Winds
Venango County									
Wesley	25	1430EST			0	0	0	0	Hail (1.75)
Butler County									
Mars	25	1555EST			0	0	0	0	Thunderstorm Winds
Clinton County									
Lock Haven	25	1610EST			0	0	0	0	Hail (0.75)
Countywide	25	1645EST			0	0	0	0	Flood/Flash Flood
									Flooding was observed along Route 150 and Germantown Road (664).
Washington County									
Mt. Pleasant	25	1650EST			0	0	3	0	Thunderstorm Winds
									Trees were downed. Minor damage was done to one home when a tree limb put a hole in the roof.
Centre County									
Woodward	25	1900EST			0	0	0	0	Flood/Flash Flood
									Minor flooding was observed.
Juniata County									
Thompsontown	25	1915EST			0	0	0	0	Thunderstorm Winds
Clinton County									
Countywide	25	1931EST			0	0	0	0	Flood/Flash Flood
									Small stream flooding was observed.
Allegheny County									
Plum	25	1750EST			0	0	4	0	Thunderstorm Winds
									Barn blown apart. Trees and power lines down.
Westmoreland County									
Murrysville	25	1800EST			0	0	3	0	Thunderstorm Winds
									Trees and powerlines down.
PENNSYLVANIA, Western Cont'd									
Indiana County									
2S Indiana	26	1549EST			0	0	0	0	Hail (0.75)
Fayette County									
Countywide	27	0800EST			0	0	0	0	Flood/Flash Flood
									Small stream flooding was observed.
Westmoreland County									
Countywide	27	0800EST			0	0	0	0	Flood/Flash Flood
									Small stream flooding was observed.
Elk County									
Countywide	27	1455EST			0	0	4	0	Flood/Flash Flood
									Basement flooding was observed at St. Marys. Small stream flooding was reported countywide.
Warren County									
Countywide	27	1512EST			0	0	0	0	Flood/Flash Flood
									Just over three inches (3.20) of rain fell in 2 hours resulting in small stream and poor drainage

Storm Data and Unusual Weather Phenomena

August 1994

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
									flooding.
Jefferson County									
Punxsutawney	27	1606EST			0	0	0	0	Hail (0.75)
Clearfield County									
Curwensville	27	1610EST			0	0	0	0	Hail (1.75)
Lawrence County									
New Castle	27	1700EST			0	0	0	0	Hail (0.75)
Mifflin County									
8W Lewistown	27	1850EST			0	0	0	0	Hail (1.25)
Allegheny County									
South Hills	27	1900EST			0	0	3	0	Thunderstorm Winds
West Mifflin	27	1900EST- 2100EST			0	0	5	0	Flash Flood
Trees and powerlines were downed at South Hills. In West Mifflin, over 3.00 inches of rain in 2 hours resulted in flooding. Streams were out of their banks and several roads were impassable. At Lincoln Place, people were trapped in their cars by the rapidly rising water. One family had to be pulled from their car window. On Route 885, a 26 foot section of pavement was buckled.									
Westmoreland County									
Vandergrift	27	1930EST			0	0	0	0	Hail (0.75)
Countywide	27	1930EST- 2130EST			0	0	0	0	Flood/Flash Flood
Small stream and poor drainage flooding was observed.									
Venango County									
Centerville	27	2000EST			0	0	0	0	Small Stream Flooding
In Pinegrove Township, a road was closed by a flooded stream.									
Crawford County									
Meadville	28	1420EST			0	0	5	0	Thunderstorm Winds
Meadville	28	1506EST- 1645EST			0	0	4	0	Flood/Flash Flood
Conneaut	28	1506EST			0	0	2	0	Thunderstorm Winds
Meadville	28	1520EST			0	0	0	0	Hail (1.00)
Flooding was observed along Route 322. Route 27 was flooded and closed. Trees were downed near the Conneaut Lake Park. In Fallowfield Township, 2 people were injured when they drove their car into a tree which had already fallen. Many power outages were reported countywide.									
Warren County									
Sheffield	28	1540EST			0	0	0	0	Thunderstorm Winds
PENNSYLVANIA, Western Cont'd									
Venango County									
Countywide	28	1540EST			0	0	4	0	Thunderstorm Winds
Widespread tree damage was observed. A tree fell on a boathouse at Oil City.									
Forest County									
Hastings	28	1540EST	2.5	85	0	0	?	0	Tornado (F1)
Pigeon	28	1625EST			0	0	0	0	Thunderstorm Winds
A tornado occurred in northeast Forest County, 18 miles north east of Tionesta. The damage path was from Hastings Run to just north of Lynch, Pennsylvania, along Route 666. One permanent home and 15 summer homes were damaged. Five camps were totally destroyed. Hundreds of trees were downed, many broke off 15 to 20 feet above ground. Route 666 was closed and extensive clean-up was required.									
Elk County									
Highland	28	1630EST			0	0	0	0	Thunderstorm Winds
Trees down along Route 948.									
Mckean County									

Storm Data and Unusual Weather Phenomena

August 1994

August 1994									
Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
Kane	28	1630EST			0	0	3	0	Thunderstorm Winds
Trees and powerlines down. Several roads were blocked by fallen trees.									
Potter County Keating Summit	28	1630EST			0	0	0	0	Thunderstorm Winds
Trees down across Route 607.									
Cameron County Truman	28	1635EST			0	0	0	0	Thunderstorm Winds
Butler County Rattigan	28	1719EST			0	0	0	0	Thunderstorm Winds
Armstrong County Templeton	28	1750EST			0	0	0	0	Thunderstorm Winds
Indiana County Dixonville	28	1830EST			0	0	0	0	Thunderstorm Winds
Cambria County Bornsboro	28	1855EST			0	0	0	0	Thunderstorm Winds (G51)
Lake Erie Pennsylvania Waters	29	1530EST- 1640EST			0	0	0	0	Waterspouts
A number of waterspouts were reported offshore and several cold air funnels near the shore. No known landfall or touchdowns occurred.									
RHODE ISLAND									
Providence County Providence Cranston	05	1245EST- 1315EST			0	0	5	0	Lightning
Kent County W. Warwick	05	1720EST			0	0	3	0	Lightning
Providence County Cranston	05	1730EST			0	0	3	0	Lightning
In Providence, lightning struck two buildings causing a fire that burned the upper floor of a house and knocking the chimney off a Brown University building. In Cranston, lightning started a fire in a single family house and destroyed a barn. In West Warwick, lightning blew a chimney apart and started a fire in the attic of an apartment building.									
Kent County Coventry	13	1730EST	.5	50	0	0	?	0	Tornado (F0)
A small tornado touched down along a line near Hope Furnace Road to Clarke Road to Oak Street to Howard Avenue. Residents reported seeing the funnel. Many trees were uprooted and three poles snapped off.									
RHODE ISLAND Cont'd									
Providence County Scituate	13	1730EST- 1745EST			0	0	?	0	Thunderstorm Winds
The tops of many trees were sheared off and poles were reported knocked down.									
SOUTH CAROLINA									
Sumter County Shaw Field	01	1253EST	Short	Narrow	0	0	0	0	Thunderstorm Winds
Shaw Field Army Airforce Base reported wind gusts to 58 knots.									
Orangeburg County Cordova	01	1530EST			0	0	5	0	Urban Flooding
Heavy rains produced the worst street flooding in many years in Cordova.									
Darlington County Darlington	01	1607EST			0	0	4	0	Thunderstorm Winds

Storm Data and Unusual Weather Phenomena

August 1994									
Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
Highway Patrol reported power lines down in Darlington.									
Colleton County 14 NW Walter- boro	01	1840EST	0.1	25	0	0	3	0	Tornado (F0)
Tornado blew down trees, damaged roof of farm building, several cars and farm equipment.									
Sumter County Shaw Field AFB	05	1235EST			0	0	?	0	Thunderstorm Wind
Shaw Field Air Force Base reported wind gust to 58 knots during thunderstorm.									
Darlington Co, Darlington	05	1607EST			0	0	?	0	Thunderstorm Wind
Power lines blown down in Darlington reported by Highway Patrol.									
Georgetown County Georgetown	05	1950EST			0	0	0	0	Waterspout
Kershaw County Lugoff	11	2000EST			0	0	4	0	Lightning
Lightning hit the Lugoff-Elgin High School three times during a thunderstorm causing considerable damage. Power to more than 900 households was disrupted.									
Bamberg County 5 SSE Govan to 1 N Govan	16	1009EST- 1030EST	5	75	0	1	4	?	Tornado (F1)
Tornado touched down near intersection of Highways 64 and 301, moved north northwest to slightly north of Govan. The tornado was up and down many times topping trees. One mobile home was overturned and heavily damaged.									
Orangeburg County Neese	16	1120EST- 1125EST	.07	50	0	0	4	?	Tornado (F1)
Tornado downed trees and power lines at Neese.									
Lexington County Pelion	16	1155EST- 1200EST			0	0	0	0	Funnel Cloud
Lexington County 3 SE Gilbert	16	1200EST- 1202EST	0.06	50	0	0	?	?	Tornado (F2)
SOUTH CAROLINA Cont'd									
Lexington County Edmund	16	1216EST	0.5	30	0	4	0	0	Tornado (F0)
Tornado observed as it touched down and damaged trees and home in southeast Edmund. It lifted and moved across Edmund Fire Station, then touched down and damaged pine forest immediately north of Edmund.									
Lexington County 5 S of Lexington to Red Bank	16	1227EST- 1230EST	2	25	0	0	?	?	Tornado (F2)
Tornado demolished the north portion of a mini-warehouse complex near the SC602 and SC 6 intersection. It moved northward and overturned three cars in Redbank, blew down trees and power lines.									
Lexington County 3 SSE Lexington to Secret Cove, Lake Murray	16	1235EST- 1250EST	8	440	0	40	7	?	Tornado (F3)
Tornado touched down near intersection of SC311 and SC244 3 miles south-southeast of Lexington. Major damage occurred to the Glassmaster factory at the intersection of SC6 and Interstate 20. The									

Storm Data and Unusual Weather Phenomena

August 1994

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

tornado from that point was mostly on the ground as it moved through east and north central Lexington. Outside of Lexington, the tornado passed near the Rikard Nursing home. The storm became more intense with another area of severe damage in the Secret Cove area along the south Lake Murray shore. The tornado apparently dissipated over Lake Murray although strong winds were noted in the Old Forbes Road area on the northern shore of Lake Murray. Approximately 200 homes were damaged, many businesses, several churches and public buildings were also damaged. Five electric substations were damaged in Lexington County with 15,000 customers without electrical power. Forty people were injured. The tornado was observed by many people from the time it first struck near SC602 until it dissipated over Lake Murray.

Richland County 1 SE McEntire Airport

16 1230EST-
1237EST 2 50 0 0 ? ? Tornado (F0)

Tornado was up and down several times taking down trees and power lines. A funnel cloud was sighted but, no touchdowns reported.

Lexington County 3 SW Columbia Airport

16 1253EST-
1310EST 0.1 100 0 0 ? ? Tornado (F0)

Tornado funnel cloud observed by FAA Control Tower and National Weather Service personnel at the Columbia Airport. The tornado touched down briefly in a wooded area 3 miles southwest of the Airport destroying a small area of timber and then moved to 3 miles northwest of the Airport as a funnel cloud.

Richland County 1 N Balentine

16 1318EST-
1322EST 1 75 0 0 ? ? Tornado (F1)

Newberry County Peak

16 1332EST-
1334EST 0.5 50 0 0 ? ? Tornado (F1)

Tornado took down trees and power lines and damaged roofs to some homes.

Lexington County 4 S Lexington

16 1335EST-
1337EST 0.3 75 0 0 ? ? Tornado (F3)

Tornado completely destroyed a square stick frame home.

Fairfield County Strother to Dawkins

16 1343EST-
1345EST 0.5 50 0 0 ? ? Tornado (F0)

Tornado touched down in a rural area taking out trees.

SOUTH CAROLINA Cont'd

Kershaw County Near Liberty Hill

16 1400EST-
1402EST 0.08 50 0 0 ? ? Tornado (F0)

Trees and power lines blown down.

Chester County SE Portion

16 1430EST 0 0 ? ? Hail (0.75)
Thunderstorm Winds

Large hail and thunderstorm winds reported at Richburg.

Newberry County 2 E Prosperity

16 1431EST 0 0 ? ? Thunderstorm Winds

Limbs and large tree blown down.

Greenwood County Ware Shoals Anderson County 5 NE Anderson

16 1440EST 0.1 30 0 0 4 0 Tornado (F0)

16 1500EST 0 0 0 0 Funnel Cloud

Storm Data and Unusual Weather Phenomena

August 1994									
Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<p>A weak tornado touched down briefly at the Laurens/Greenwood County border near Ware Shoals. Several trees and power lines were downed and a roof of a shed was blown off. The parent storm moved northwest rapidly and a funnel cloud was observed over Interstate 85.</p>									
Union and Spartan- burg Counties Santuck to Monarch to Jonesville to 2 S Cowpens	16	1450EST- 1600EST	30	250	0	0	5	?	Tornado (F3)
<p>Tornado began near Santuc as a large multi-vortex F3 tornado. Spotters engaged the storm almost immediately and followed it as it curved north to northwest through the County. The storm had intermittent ground contact of about 30 to 40 percent but there was not a great deal of separation between areas of damage. The path width gradually diminished to about 50 yards from 0.75 mile initially, and the storm intensity gradually weakened to F2 and then to F1 at Pauline. The tornado crossed into Spartanburg County near Pacolet Mills at 1545EST. A well constructed home near Santuc was destroyed, a stationary vehicle was thrown about 150 yds, and other homes and structures received severe damage along its path.</p>									
Union, Spartanburg, Cherokee Counties Carlisle to 5 SW Lockhart to 5 NE Jonesville to 2 S Cowpens	16	1500EST- 1622EST	30	150	0	0	5	?	Tornado (F1)
<p>This tornado was nearly parallel to the Santuc tornado described above. It moved along a track 2 to 3 miles east of the first storm and just a few minutes later. This tornado was not as large nor intense as the first tornado and was on the ground about 20 to 30 percent of the time. The most damage occurred around Carlisle where the roof of a restaurant was removed and homes and mobile homes were damaged - and at the end of its track at Cowpens where nearly \$80,000 damage was done to homes and mobile homes. At Cowpens, one resident watched the tornado become stationary for a minute or so in an open field just before it dissipated. The tornado crossed into Cherokee County at 1600EST and into Spartanburg County at 1620EST. Spotters were able to follow both the above tornadoes for most of their paths through Union County.</p>									
Fairfield County 2 S Fairfield County Airport	16	1600EST			0	0	?	?	Thunderstorm Winds
<p>Emergency Preparedness Director reported trees down 2 miles south of County Airport</p>									
Cherokee County 6 E Cowpens	16	1656EST- 1702EST	3	75	0	0	5	?	Tornado (F1)
SOUTH CAROLINA Cont'd									
<p>This tornado touched down briefly and caused severe damage to a large well-constructed home. Otherwise, damage was limited to trees, powerlines, and outbuildings. The tornado moved northwest along a 3-mile track before dissipating.</p>									
Cherokee County Blacksburg to 4 NNW Blacksburg	16	1736EST- 1745EST	4	100	0	0	5	?	Tornado (F2)
<p>This tornado caused substantial damage to homes and a couple of churches. It crossed Interstate 85 and then moved into North Carolina. The vortex was clearly visible to many people in the area as it moved along the base of a small mountain at Blacksburg.</p>									
Union Cherokee County Lockhart to 5 NW Lockhart to 10 NW Lockhart	16	1805EST- 1820EST	10	150	0	1	5	?	Tornado (F2)
<p>The tornado struck near Lockhart where a woman was injured when a mobile home was destroyed. The mobile home was picked up with a woman and son inside and tossed about 100 yards. Two brick homes were virtually destroyed in the same area. The tornado crossed into Cherokee County at 1810EST and moved to Gowdeysville where a church was destroyed and some homes severely damaged.</p>									

Storm Data and Unusual Weather Phenomena

August 1994

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<p>Damage from the above tornadoes exceeded \$800,000 in Cherokee County, about \$600,000 in Union County, near \$90,000 in Spartanburg County, and less than \$10,000 in Greenwood County.</p>									
Newberry County 5 NNW Chapin	16	1455EST			0	0	?	?	Thunderstorm Winds
Trees blown down near highway 176.									
Fairfield County 9 NE Ridgeway	16	1530EST- 1533EST	0.3	50	0	0	?	?	Tornado (F2)
Tornado blew down large trees and ripped a roof and rafters off a home at intersection of SC101 and Rocky Point Road.									
Fairfield County 2 S Winnsboro Airport	16	1530EST- 1533EST			0	0	?	?	Thunderstorm Winds
York County W Portion	16	1535EST			0	0	?	?	Thunderstorm Winds
Numerous trees down between Hickory Grove and Smyrna									
Fairfield County 8 SSW Winnsboro	16	1644EST- 1646EST	0.06	100	0	0	?	?	Tornado (F0)
Tornado touched down at SC54 and SC269 and took out trees									
York County 4 S York	16	1650EST- 1652EST	0.08	50	0	0	?	?	Tornado (F0)
Tornado struck near highway SC321 and damaged an area of trees.									
Chester County 7 W Chester	16	1755EST- 1758EST	0.25	75	0	0	?	?	Tornado (F1)
Tornado touched down near Woods Ferry Road between highways 9 and 72 blowing down trees.									
Greenville, Pickens, and Oconee Counties N Portion	16	2000EST			0	0	?	?	Flood
SOUTH CAROLINA Cont'd									
Greenville County N Portion	17	0300EST			0	0	5	6	Flood Flash Flood
Pickens County NE Portion	17	0300EST			0	0	5	6	Flood Flash Flood
Oconee County N Portion	17	0300EST			0	0	5	?	Flood Flash Flood
Spartanburg County	17	0300EST			0	0	?	?	Flood
Cherokee County	17	0300EST			0	0	?	?	Flood
Union County	17	0300EST			0	0	?	?	Flood
Anderson County	17	0300EST			0	0	?	?	Flood

Rainfall associated with Tropical Storm Beryl totaled 4 or 5 inches in the Piedmont area of the Upstate to 12 inches in the mountains. On top of heavy rain 1 to 2 days earlier, and with the wet season, this caused severe flooding in northern Greenville and Spartanburg Counties. The flooding along the Saluda River system north of Greenville was the worst in the past 60 years or more with damage in Greenville and Spartanburg Counties combined exceeding \$500,000. The Reedy River in Greenville reached 11 feet which is the lower range of moderate flooding. In Oconee County damage totaled about \$400,000.

Storm Data and Unusual Weather Phenomena

August 1994									
Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<p>Along the Saluda and its tributaries, several houses were flooded and destroyed. A few bridges were wiped out and crops were flooded. Several businesses also suffered extensive flood damage. In Oconee County, Westminster's water supply was contaminated (this actually started before the heavy rain from Beryl) and later mudslides and flooding damaged highways and bridges leading into the mountains. There was one indirect death and three injuries when people attempted to raft on high water in the Chatooga River bordering Georgia.</p>									
Pickens County Pickens	19	1538EST			0	0	4	0	Hail (1.00) Thunderstorm Winds
Oconee County Salem Area	19	1600EST			0	0	?	0	Heavy Rain Mud Slides
Spartanburg County Reidville	19	1604EST			0	0	?	?	Hail (1.75)
Greenville County 2 S of Simpsonville	19	1645EST			0	0	?	0	Hail (0.75)
Spartanburg County Woodruff	19	1650EST			0	0	?	0	Hail (0.75)
Greenville County Mauldin	19	1653EST			0	0	4	0	Hail (0.75) Thunderstorm Winds
Greenville County Mauldin	19	1700EST			0	0	5	0	Lightning
Laurens County Fountain Inn	19	1700EST			0	0	?	?	Hail (0.75)
<p>Large, slow moving, marginally severe thunderstorms developed along the mountains and moved south through the upstate, interacting with left-over tropical air from Tropical Storm Beryl. Trees were pushed over (partly because of the soggy ground as opposed to excessively high winds), large hail fell in some places, and in Mauldin - lightning struck and burned one business to the ground. Heavy rainfall in the mountains caused some minor recurrence of the mudslide problem from earlier in the week.</p>									
York County 4 NE Rock Hill	19	1800EST			0	0	0	0	Hail (1.00)
One-inch hail at the York County Airport									
SOUTH CAROLINA Cont'd									
Charleston County 3 Isle of Palms	20	0605EST			0	0	0	0	Waterspout
Colleton County Seabrook Island and Edisto Beach	20	0812EST			0	0	0	0	Waterspouts
Richland County NE Columbia	21	1417EST			0	0	5K	0	Thunderstorm Winds
Trees and large signs were blown down at Two Notch and Beltline Blvd.									
Sumter County	21	1507EST			0	0	0	0	Thunderstorm Winds
Lee County Salem Church Road Area	21	1512EST			0	0	0	0	Thunderstorm Winds
Trees were downed on Salem Church Road.									
Darlington County E Portion	21	1535EST			0	0	0	0	Thunderstorm Winds
Trees were downed by thunderstorm winds in the eastern half of the county.									
Florence County N Portion	21	1525EST			0	0	0	0	Thunderstorm Winds

Storm Data and Unusual Weather Phenomena

August 1994

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
Trees were downed in the northern half of the county.									
Spartanburg County Spartanburg	22	Unknown			1	0	0	0	Heat
Death caused by heat (M030)									
York County Rock Hill	27	1651EST			0	0	10K	0	Thunderstorm Winds
Trees and power lines were down in Rock Hill.									
Cherokee County Gaffney	31	2000EST			0	0	4	0	Lightning
SOUTH DAKOTA									
Pennington Co, Hill City SD	02	1640MST			0	0	0.3K	0	Lightning
Lightning damaged a circuit breaker, knocking out power to Hill City for 2 1/2 hours.									
Bon Homme Co, Springfield SD	03	1200CST			0	0	2.0K	0	Thunderstorm Wind (G58)
Thunderstorm winds uprooted trees and blew down some power lines.									
Hughes Co, Pierre SD	05	1300CST			0	0	1.0K	0	Lightning
Lightning struck a light pole, causing a power surge that damaged some radios and other equipment in a Department of Criminal Investigations building.									
Haakon Co, near Philip SD	06	1720MST- 1825MST			0	0	?	?	Wild/Forest Fire
Lightning started several prairie fires.									
Campbell Co, Herreid SD	06	2227CST			0	0	?	?	Hail(175)
Hutchinson Co, 6E Dimock SD	07	1753CST	?	?	0	0	1.0K	4.0K	Tornado(F0)
SOUTH DAKOTA Cont'd									
A tornado damaged crops and some farm machinery.									
McCook Co, Bridgewater SD	07	1800CST			0	0	0	0	Hail(075)
6SW Bridgewater SD		1800CST			0	0	0	0	Hail(088)
Hutchinson Co, 10WNW Freeman SD	07	1815CST			0	0	?	?	Hail(175)
Turner Co, 4N Parker SD	07	1855CST			0	0	0	0	Hail(100)
Hand Co, 13NNE Miller SD	09	0210CST			0	0	?	?	Hail(175)
14W Miller SD		0225CST			0	0	?	?	Hail(175)
Harding, Butte Cos	09	1600MST- 1730MST			0	0	3.0K	.01M	Wild/Forest Fire
Lightning started several prairie fires, burning about 10 thousand acres of grassland.									
Todd Co, Mission SD	09	1700MST- 1730MST			0	0	?	0	Thunderstorm Wind

Storm Data and Unusual Weather Phenomena

August 1994									
Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
Deuel, Hamlin Cos	09 10	2200CST- 1900CST			0	0	0.3M	?	(G52) Flash Flood
Flash flooding washed out some roads, caused some vehicles to slide into ditches, damaged standing vehicles, washed out fencing, and flooded some homes and businesses. About 7 1/2 inches of rain fell at Hayti and more than 6 inches fell near Toronto.									
Perkins Co, 10SW Bison SD	11	0300MST- 0400MST			0	0	1.0K	4.0K	Wild/Forest Fire
Lightning started several prairie fires.									
Fall River Co, Hot Springs SD Oelrichs SD	11	1443MST 1546MST			0 0	0 0	1.0K ?	5.0K ?	Hail(175) Hail(175)
Haakon Co, 8W Philip SD	11	1710MST	1.0	50	0	0	0	0	Tornado(F0)
Jackson Co, 25SE Kadoka SD	11	1748MST	0.5	50	0	0	0	0	Tornado(F0)
Pennington Co, Rapid City SD	11	1815MST- 1900MST			0	0	0	0	Thunderstorm Wind (G52), Hail(075)
Meade Co, Piedmont SD	15	1400MST			0	0	.01M	?	Wild/Forest Fire
Lightning started several fires in the area northwest of Rapid City, including a large fire that burned over 120 acres in Stagebarn Canyon near Piedmont.									
Butte Co, Newell, Fruitdale SD	16	1630MST- 1715MST			0	0	0.1M	0.3M	Thunderstorm Wind (G65) Hail(175)
Thunderstorm winds blew down power lines and poles and blew down many tree limbs, one of which caused severe damage to a van, and ripped the roof off of a mobile home. Hail caused widespread damage to corn and other crops.									

SOUTH DAKOTA Cont'd

Meade Co, Ft. Meade, 10E Piedmont SD	16	1800MST- 1810MST			0	0	?	?	Thunderstorm Wind (G58) Hail(175)
Pennington Co, Rapid City SD	16	1815MST			0	0	1.0K	0	Thunderstorm Wind (G58) Hail(075)
Thunderstorm winds blew down some trees and power lines.									
Pennington Co, Caputa SD	16	1900MST			0	0	0	0	Thunderstorm Wind (G52)
Shannon Co, Oglala SD	16	2010MST- 2030MST			0	0	?	0	Thunderstorm Wind (G62)
Charles Mix Co, 3W Platte, 2NE Lake	18	2140CST-							

Storm Data and Unusual Weather Phenomena

August 1994									
Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
Andes SD		2235CST			0	0	0.1M	0.8M	Hail(275)
Widespread hail caused damage to vehicles and shingles, and broke windows. The hail also caused widespread and severe damage to crops.									
Roberts Co, 2SE New Effington	23	1600CST	?	?	0	0	1.0K	0	Tornado(F0)
The tornado uprooted trees and damaged a corn planter.									
Edmunds Co, Mina SD	25	1100CST- 1135CST			0	0	?	?	Wild/Forest Fire
Lightning started a grass fire.									
Brown Co, 3NW Frederick SD	25	1130CST			0	0	0	0	Hail(075)
Turner Co, 2NE Marion SD	25	1500CST			0	0	2.0K	0	Thunderstorm Wind (G52)
Thunderstorm winds damaged trees and some small buildings, and blew out a window at a farmhouse.									
Meade Co, 2NW Piedmont SD 25E Piedmont SD	29	1505MST- 1547MST 1540MST			0 0	0 0	? ?	? 0	Hail(175) Thunderstorm Wind (G57)
Pennington Co, Box Elder SD 10E Wall SD	29	1536MST 1547MST			0 0	0 0	0 ?	0 ?	Hail(075) Hail(175)
Jackson Co, Cedar Pass SD	29	1710MST- 1730MST			0	0	?	?	Thunderstorm Wind (G53) Hail(175)

TENNESSEE AUG 1994

Please refer to the second section of **Storm Data and Unusual Weather Phenomena**.

TEXAS, Panhandle

Dallam County 5 N Dalhart	01	1947CST			?	?	?	?	Hail (2.75)
Dime- to golfball-size hail was reported by the Dallam County Sheriff's Office.									
Lipscomb County Lipscomb	07	1820CST			?	?	?	?	Hail (2.75)
Armstrong County Goodnight	07	1827CST			?	?	?	?	Hail (0.75)
Grayson County Carpenters Bluff	07	1105CST			?	?	?	?	Thunderstorm Wind
Grayson County Pottsboro	07	1125CST			?	?	?	?	Thunderstorm Wind
Grayson County Tom Bean	07	1145CST			?	?	?	?	Hail (1.75)
Grayson County Sherman	07	1150CST			?	?	?	?	Thunderstorm Wind
Randall County 12 E Canyon	19	1810CST			?	?	?	?	Hail (1.75)

Storm Data and Unusual Weather Phenomena

August 1994

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage Property - Crops	Character of Storm
Randall County								
11 E Canyon	19	1845CST			?	?	? 1.5K	Thunderstorm Wind (G60)
Hall County								
2 N Turkey	19	2130CST			?	?	? .02M	Lightning
Storms blew the roof off a trailer just west of the entrance to Palo Duro State Park. Several large limbs were also broken. A mobile home was struck by lightning in Hall County and burnt to the ground.								
Randall County								
3 S Amarillo	19	1825CST			?	?	? ?	Thunderstorm Wind (G52)
Potter County								
2 N Amarillo	19	1827CST			?	?	? ?	Hail (1.00)
Randall County								
4 SW Amarillo	19	1835CST			?	?	? ?	Hail (0.75)
Potter County								
3 NW Amarillo	19	1835CST			?	?	? ?	Thunderstorm Wind (G52)
Swisher County								
Tulia	19	1925CST			?	?	? ?	Thunderstorm Wind (G55)
Winds in Randall County were estimated by a National Weather Service employee, while the winds in Potter County were received from the MediVac Flight for Life heliport. Skywarn storm spotters reported the hail and Tulia Police Department provided the wind report.								
Randall County								
4 NW Happy	23	1830CST			?	?	? ?	Hail (1.75)
A secretary with the NWS reported that golfball-size hail was produced by this thunderstorm in south Randall County.								
TEXAS, Northern								
Fannin County								
5 N Savoy	07	1040CST			0	0	3 0	Thunderstorm Winds
Trees were blown down at Anthony (5 N Savoy).								
Grayson County								
Carpenters Bluff	07	1105CST			0	0	4 0	Thunderstorm Winds
Trees and power lines were blown down by thunderstorm winds.								
TEXAS, Northern Cont'd								
1 NW Denison	07	1125CST			0	0	0 0	Thunderstorm Winds (G52)
1 N Pottsboro	07	1125CST			0	0	0 0	Thunderstorm Winds (G52)
1 E Sherman	07	1130CST			0	0	0 0	Thunderstorm Winds (G52)
Tom Bean	07	1145CST			0	0	0 0	Hail (1.75)
1 SW Sherman	07	1150CST			0	0	3 0	Thunderstorm Winds
Trees were blown down onto cars at a church.								
Collin County								
Anna	07	1210CST			0	0	2 0	Thunderstorm Winds
Large tree limbs were blown down by high winds.								
McKinney								
	07	1230CST			0	0	2 0	Thunderstorm Winds
A large tree was blown down at the McKinney Airport.								
McKinney								
	07	1251CST			0	0	0 0	Flash Flooding
Flash flooding occurred at Highway 75 and Highway 380 in McKinney.								
Frisco								
	07	1305CST			0	0	0 0	Hail (0.75)
Plano								
	07	1325CST			0	0	0 0	Hail (0.75)
Cooke County								
Lake Ray Roberts	07	1225CST			0	0	0 0	Thunderstorm Winds (G52)

Storm Data and Unusual Weather Phenomena

August 1994									
Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
14 N Lindsay	07	1634CST			0	0	0	0	Hail (0.75)
Muenster	07	1655CST			0	0	0	0	Hail (0.75)
Valley View	07	1707CST			0	0	0	0	Hail (1.75)
Denton County									
Pilot Point	07	1230CST			0	0	0	0	Thunderstorm Winds (G69)
3 N Sanger	07	1707CST			0	0	0	0	Hail (1.75)
Dallas County									
1 N Richardson	07	1326CST			0	0	0	0	Hail (1.00)
Richardson	07	1330CST-							
		1340CST			0	0	0	0	Hail (1.00)
Richardson	07	1331CST			0	0	0	0	Flash Flooding
Street flooding occurred in Richardson.									
Garland	07	1340CST			0	0	0	0	Hail (0.75)
Jack County									
5 N Jermyn	07	1510CST			0	0	0	0	Hail (1.75)
5 N Jermyn	07	1510CST			0	0	4	0	Thunderstorm Winds
Wind damage to trees and power lines was reported by the Channel 3 TV Station in Wichita Falls.									
Clay County									
Bluegrove	07	1335CST			0	0	?	?	Hail (0.75)
5S Henryetta	07	1350CST			0	0	?	?	Hail (0.88)
Deer Creek	07	1407CST			0	0	?	?	Hail (1.75)
6 NW Shannon	07	1431CST			0	0	?	?	Hail (1.25)
Archer County									
Archer City	07	1445CST			0	0	?	?	Hail (0.75)
1 W Archer City	07	1500CST			0	0	?	?	Hail (0.88)
7 S Windthorst	07	1504CST			0	0	?	?	Hail (1.00)
9 S Windthorst	07	1505CST			0	0	?	?	Hail (1.75)
9 S Windthorst	07	1505CST			0	0	?	?	Thunderstorm Winds
Severe thunderstorms across Clay and Archer Counties produced hail up to golfball size and isolated wind damage. Power poles were reported downed 9 miles south of Windthorst									
Young County									
During the afternoon and evening of August 7th, severe thunderstorms moved across Young County, producing widespread hail damage with some high winds. The peanut crop for the county was completely destroyed, 20 percent of the pecan crop was destroyed, and 200 acres of cotton was destroyed. Agricultural losses were estimated at \$600,000. Property losses from wind and hail to cars, homes, and windows was estimated at \$2,000,000.									
TEXAS, Northern Cont'd									
1 SE Markley	07	1510CST			0	0	?	?	Hail (1.75)
6 NW Graham	07	1530CST			0	0	?	?	Hail (1.75)
3 S Graham	07	1540CST			0	0	2	0	Thunderstorm Winds
Shingles were blown off by high winds at Fort Belknap Park (3 S Graham).									
1 N Newcastle	07	1550CST			0	0	?	?	Hail (2.75)
3 S Newcastle	07	1557CST			0	0	?	?	Hail (1.75)
1 SW Graham	07	1610CST			0	0	?	?	Hail (1.75)
Tarrant County									
5 NW Lake Worth Village	07	1552CST			0	0	0	0	Hail (1.50)
3 W Benbrook	07	1603CST			0	0	0	0	Hail (0.75)
Dime-size hail occurred in western Tarrant County 3 miles west of Benbrook on Interstate 20.									
Lake Worth Village	07	1610CST			0	0	3	0	Thunderstorm Winds
Wind damage occurred at an apartment complex roof from high winds.									
North Richland Hills	07	1610CST			0	0	3	0	Thunderstorm Winds
Some aluminum siding was blown off a house.									

Storm Data and Unusual Weather Phenomena

								August 1994
Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed Injured		Estimated Damage Property Crops	Character of Storm
Eules	07	1620CST			0	0	3 0	Thunderstorm Winds
Power lines were blown down by thunderstorm winds.								
Kennedale	07	1640CST			0	0	3 0	Thunderstorm Winds
Trees were blown down by thunderstorm winds.								
1 W Arlington	07	1640CST			0	0	3 0	Thunderstorm Winds
A large billboard was blown down at the intersection of Loop 820 and the Mansfield Highway.								
Johnson County Alvarado	07	1600CST			0	0	4 0	Thunderstorm Winds
Storage buildings, trees, and power lines were blown down.								
Hill County Itasca	07	1625CST			0	0	3 0	Thunderstorm Winds
Power lines were blown down by thunderstorm winds.								
Stephens County Crystal Falls	07	1643CST			0	0	0 0	Hail (1.25)
Hubbard Creek Lake	07	1655CST			0	0	0 0	Hail (1.75)
Harrison County Marshall	08	0130CST			0	0	0 0	Flash Flooding
Rainfall of 5.6 inches in Marshall resulted in Highway 59 being closed by high water.								
Nacogodoches County Nacogodoches	08	0230CST			0	0	0 0	Flash Flooding
Over 5 inches of rain caused street flooding and forced two creeks out of banks. Twelve streets were closed by high water. Some flooding also occurred at Highway 226 and Highway 21.								
Wichita County Burkburnett	14	1740CST			0	0	? ?	Thunderstorm Winds
Archer County 7 WNW Archer City	14	2015CST			0	0	? ?	Thunderstorm Winds
Severe thunderstorms the evening of the 14th produced areas of wind damage over Wichita and								
TEXAS, Northern Cont'd								
Archer County. High winds ripped the roof off of a metal building at Burkburnett, and ripped the shingles off a roof and caused fence damage 7 miles west-northwest of Archer City.								
Wichita County 5 NNE Wichita Falls	17	1820CST			0	0	? ?	Thunderstorm Winds (G61)
Clay County Byers	17	1823CST			0	0	? ?	Thunderstorm Winds (G52)
Wichita County 3 E Wichita Falls	17	1830CST			0	0	? ?	Thunderstorm Winds (G61)
2 E Burkburnett Clay County	17	1835CST			0	0	? ?	Thunderstorm Winds (G65)
Byers	17	1837CST			0	0	? ?	Hail (0.75)
Henrietta	17	1850CST			0	0	? ?	Thunderstorm Winds (G52)
Archer County 1.5 N Windthorst	17	1900CST			0	0	? ?	Thunderstorm Winds (G52)
Wichita County Wichita Falls	17	1910CST			0	0	? ?	Thunderstorm Winds
Wilbarger County 8 N Vernon	17	2025CST			0	0	? ?	Thunderstorm Winds (G65)
Foard County 3 N Crowell	17	2045CST			0	0	? ?	Thunderstorm Winds
Crowell	17	2045CST	2.0	40	0	0	5 ?	Tornado (F2)

Storm Data and Unusual Weather Phenomena

August 1994

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
Knox County									
Munday	17	2125CST			0	0	4	?	Thunderstorm Winds (G65)
Munday Tx	17	2130CST			0	0	?	?	Thunderstorm Winds (G65)
Severe thunderstorms moved across two areas of north Texas during the evening hours of the 17th. The first storms moved across Archer, Wichita, Wilbarger, and Clay Counties during the evening hours of the 17th producing large hail and damaging winds. Trees were downed in Wichita Falls.									
The second area of severe storms caused widespread damage from near Margaret in Foard County to Munday in Knox County. One tornado occurred with this area of storms.									
An F2 tornado moved along a 2 mile path in the area near Crowell. This was most likely a gustnado, and moved along the leading edge of the storms. At least 4 homes were either heavily damaged or destroyed in the Crowell area.									
Winds estimated at 75 miles per hour moved through the Munday area. A semi truck was blown over, and homes were damaged by the strong winds									
Montague County									
Bowie	17	1915CST			0	0	0	0	Thunderstorm Winds (G56)
5 NW Bowie	17	1915CST			0	0	0	0	Hail (1.00)
Jack County									
10 E Jacksboro	17	1945CST			0	0	0	0	Thunderstorm Winds (G52)
Perrin	17	2008CST			0	0	0	0	Thunderstorm Winds (G52)
Wise County									
Decatur	17	1945CST			0	0	3	0	Thunderstorm Winds
Strong winds damaged the courthouse roof.									
7 W Decatur	17	1945CST			0	0	0	0	Thunderstorm Winds (G65)
7 SW Bridgeport	17	1950CST			0	0	5	0	Thunderstorm Winds
At Runaway Bay (7 SW Bridgeport), nine condominium units were unroofed by high winds.									
Paradise	17	2015CST			0	0	0	0	Hail (1.00)
Parker County									
Springtown	17	2015CST			0	0	0	0	Thunderstorm Winds (G61)
Reno	17	2030CST			0	0	0	0	Thunderstorm Winds (G65)
Weatherford	17	2054CST			0	0	4	0	Thunderstorm Winds (G52)
Trees and power lines were blown down by high winds.									
TEXAS, Northern Cont'd									
Aledo	17	2055CST			0	0	0	0	Thunderstorm Winds (G61)
1 S Aledo	17	2058CST			0	0	3	0	Thunderstorm Winds
Power lines were blown down by high winds.									
8 E Weatherford	17	2145CST			0	0	3	0	Thunderstorm Winds
At Willow Park (8 E Weatherford), a large wooden sign was blown down, minor RV damage occurred, and three small trees were blown down by thunderstorm winds.									
6 NE Weatherford	17	2145CST			0	0	3	0	Thunderstorm Winds
A barn was partially unroofed by high winds.									
Palo Pinto County									
Mineral Wells	17	2040CST			0	0	0	0	Thunderstorm Winds (G52)
Hood County									
Thorp Springs	17	2050CST			0	0	0	0	Thunderstorm Winds (G52)
10 N Granbury	17	2105CST			0	0	0	0	Thunderstorm Winds (G61)
Granbury	17	2110CST			0	0	0	0	Thunderstorm Winds (G65)
Johnson County									
1 W Joshua	17	2140CST			0	0	3	0	Thunderstorm Winds
Trees were blown down by thunderstorm winds.									
Haskell County									
Haskell	17	2145CST			0	0	0	0	Thunderstorm Winds (G52)

Storm Data and Unusual Weather Phenomena

August 1994									
Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage	Character of Storm	
					Killed	Injured	Property		Crops
Somervell County									
Glen Rose	17	2155CST			0	0	0	0	Thunderstorm Winds (G52)
Erath County									
12 S Stephenville	17	2215CST			0	0	2	0	Thunderstorm Winds
									Large tree limbs were blown down by thunderstorm winds.
Jones County									
1 W Stamford	17	2235CST			0	0	0	0	Thunderstorm Winds (G56)
Hamilton County									
Hico	17	2240CST			0	0	3	0	Thunderstorm Winds
									A carport was destroyed by high winds.
Coryell County									
1 W Gatesville	17	2315CST			0	0	4	0	Thunderstorm Winds (G55)
									The roof of a church was destroyed by high winds.
Grayson County									
Whitesboro	20	1420CST			0	0	0	0	Thunderstorm Winds
									A police car was blown off the road by high winds.
6 E Collinsville	20	1600CST			0	0	3	0	Thunderstorm Winds
									Trees were blown down by thunderstorm winds.
Lamar County									
Lake Pat Mayse	20	1435CST			0	0	3	0	Thunderstorm Winds
									Campers were damaged, and trees were blown down by high winds.
Archer County									
Archer City	20	1450CST			0	0	?	?	Hail (0.75)
									Isolated severe thunderstorms near Archer City produced dime size hail.
Denton County									
Sanger	20	1537CST			0	0	4	0	Thunderstorm Winds
									Trees and power lines were blown down by high winds.
TEXAS, Northern Cont'd									
Aubrey	20	1613CST			0	0	3	0	Thunderstorm Winds
									Power lines were blown down by high winds.
5 SW Justin	20	1630CST			0	0	0	0	Thunderstorm Winds (G52)
Red River County									
Bogata	20	1600CST			0	0	3	0	Thunderstorm Winds
									Trees were blown down by high winds.
Parker County									
Millsap	20	1604CST			0	0	0	0	Thunderstorm Winds (G52)
Millsap	20	1615CST			0	0	3	0	Thunderstorm Winds
									Trees were blown down by high winds.
Wise County									
Rhome	20	1620CST			0	0	3	0	Thunderstorm Winds
									Large tree limbs and telephone poles were blown down.
Newark	20	1648CST			0	0	0	0	Thunderstorm Winds (G50)
Newark	20	1650CST			0	0	5	0	Thunderstorm Winds
									Two mobile homes and the post office were unroofed by high winds.
Titus County									
Talco	20	1625CST			0	0	3	0	Thunderstorm Winds

Storm Data and Unusual Weather Phenomena

August 1994									
Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
			Trees were blown down by high winds.						
Green Hill	20	1625CST			0	0	3	0	Thunderstorm Winds
			Trees were blown down by high winds.						
Mount Pleasant	20	1640CST			0	0	3	0	Thunderstorm Winds
			Trees were blown down by high winds.						
Morris County 2 SW Omaha	20	1631CST			0	0	3	0	Thunderstorm Winds
			Trees were blown down along a 1/4 mile stretch of Highway 144.						
Omaha	20	1650CST			0	0	3	0	Thunderstorm Winds
			A barn was damaged, and trees were blown down by high winds.						
Daingerfield	20	1650CST			0	0	3	0	Thunderstorm Winds
			Trees were blown down by high winds.						
Tarrant County Bedford	20	1650CST			0	0	3	0	Thunderstorm Winds
			Utility wiring was blown loose by high winds.						
Cass County Hughes Springs	20	1700CST			0	0	5	0	Thunderstorm Winds
			Fourteen streets were blocked by fallen trees. Two cars were crushed and roofs were damaged by falling trees. Power lines were also blown down.						
Linden	20	1720CST			0	0	4	0	Thunderstorm Winds (G56)
			Roofs were damaged and trees were blown down by high winds.						
Avinger	20	1725CST			0	0	3	0	Thunderstorm Winds
			Trees were blown down by thunderstorm winds.						
McLeod	20	1810CST			0	0	0	0	Thunderstorm Winds (G56)
TEXAS, Northern Cont'd									
Kaufman County 4 NW Terrell	20	1730CST			0	0	0	0	Thunderstorm Winds (G56)
Marion County 1 N Kelleyville	20	1732CST			0	0	3	0	Thunderstorm Winds
			Trees were blown down by thunderstorm winds.						
Lake O' the Pines	20	1740CST			0	0	3	0	Thunderstorm Winds
			Trees were blown down by thunderstorm winds.						
1 E Jefferson	20	1758CST			0	0	3	0	Thunderstorm Winds
			Trees were blown down by thunderstorm winds.						
Smithland	20	1815CST			0	0	3	0	Thunderstorm Winds
			Trees were blown down by thunderstorm winds.						
Harrison County Karnack	20	1812CST			0	0	3	0	Thunderstorm Winds
			Trees were blown down near the entrance to Caddo State Park.						
Tarrant County Grapevine	31	1615CST			0	0	5	0	Thunderstorm Winds
			The roof was blown off the Farmers Market building, and roof damage occurred to the Heritag e						

Storm Data and Unusual Weather Phenomena

August 1994									
Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
									building.
Arlington	31	1625CST			0	0	3	0	Thunderstorm Winds
									Power lines were blown down by high winds.
TEXAS, Southern									
Nueces County Bishop	04	1145CST			?	?	?	?	Funnel Cloud
Nueces County Robstown	04	1145CST			?	?	?	?	Funnel Cloud
Victoria County Victoria	04	1205CST			?	?	?	?	Funnel Cloud
Cameron County Brownsville	05	0853CST			?	?	?	?	Funnel Cloud
Cameron County Brownsville	05	1355CST			?	?	?	?	Funnel Cloud
Nueces County Robstown	05	1325CST	.1	100	?	?	?	?	Tornado(F0)
Nueces County Orange Grove	05	1423CST			?	?	?	?	Funnel Cloud
Trinity County Trevot	07	1805CST			?	?	?	?	Thunderstorm Wind
Polk County Wakefield	07	1816CST- 1817CST			?	?	?	?	Thunderstorm Wind
San Jacinto County	07	1940CST- 1941CST			?	?	?	?	Thunderstorm Wind
Duval County 1 S Freer	09	1655CST			?	?	?	?	Funnel Cloud
Duval County 1 S Freer	09	1655CST			?	?	2K	3K	Hail (0.75)
Duval County Freer	09	1700CST			?	?	5K	?	Thunderstorm Wind
Guadalupe County Seguin	09	1830CST			?	?	5K	3K	Thunderstorm Wind
TEXAS, Southern Cont'd									
Chambers County Winnie	14	1730CST- 1735CST			?	?	?	?	Hail (0.75)
Cameron County 7 E Harlingen	14	0640CST	.2	100	?	?	?	?	Tornado (F0)
Polk County Goodrich	15	1415CST- 1416CST			?	?	?	?	Hail (0.75)
Brazoria County	15	1715CST- 1716CST			?	?	?	?	Thunderstorm Wind
Harris County	15	1715CST- 1718CST			?	?	?	?	Thunderstorm Wind (G50)
Harris County	15	1725CST- 1730CST			?	?	?	?	Thunderstorm Wind (G52)
Harris County	15	1730CST- 1735CST			?	?	?	?	Hail (0.75)
Brazos County E Portion	15	1634CST			?	?	?	?	Thunderstorm Wind (G55)
									Fifty-five knot winds were reported at Easterwood Airport (CLL) at 1634CST.
Victoria County Victoria	16	1855CST			?	?	?	?	Hail (1.00)
Victoria County Victoria	16	1900CST			?	?	?	?	Thunderstorm Wind

Storm Data and Unusual Weather Phenomena

August 1994

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
Roof blown off hangar at Victoria County Airport. Large tree limbs and power lines down in area.									
Harris County	17	1700CST- 1708CST			?	?	?	.1M	Thunderstorm Wind (G60)
Jefferson County	21	1300CST			?	1	0	?	Lightning
Port Neches									
Bandera County	21	1450CST- 1800CST			?	?	?	3K	Flash Flood
Medina									
Kerr County	21	1450CST- 1800CST			?	?	?	5K	Flash Flood
Mountain Home									
Jefferson County	21	1300CST			?	1	?	?	Lightning
Beaumont									
A 21-year-old male was injured by a lightning strike while mowing his lawn.									
Kerr County	22	0600CST- 0800CST			?	?	?	?	Flash Flood
Mountain Home									
Jefferson County	22	0900CST			1	0	?	?	Lightning
Port Arthur									
Victoria County	22	1345CST- 1415CST			?	?	?	?	Thunderstorm Wind
Bloomington									
Power lines blown down and large trees uprooted.									
Live Oak County	24	1455CST			?	?	?	?	Funnel Cloud
George West									
San Patricio County	30	0934CST			?	?	?	?	Funnel Cloud
Taft									
Hardin County	30	1133CST	.1	100	?	?	?	?	Tornado(F0)
5 NE Silsbee									

TEXAS, Western

Crane County	31	2255CST- 2359CST			0	0	3	0	Flash Flood
Upton County	31	2255CST- 2359CST			0	0	3	0	Flash Flood

Thunderstorms moving south through the Permian Basin caused localized street flooding in Midland and Odessa in the early evening. As the storms continued southward, heavy rains caused flooding that required closing U.S. Highway 349 in Upton County. The flooding continued past midnight, thus entering into September. By 0145CST on 9-1-94, the waters had subsided enough to allow both highways to open.

UTAH

Please refer to the second section of **Storm Data and Unusual Weather Phenomena**.

VERMONT

Rutland County	02	1515EST			0	0	2	0	Thunderstorm Wind
Lake St. Catherine									
Poultney	02	1520EST			0	0	2	0	Thunderstorm Wind

A cold front moved southeast across Vermont during the late afternoon and evening hours of August 2nd resulting in severe thunderstorms across parts of Rutland County. Numerous trees were blown down at Lake St. Catherine with trees and powerlines blown down in Poultney.

Orleans County

Storm Data and Unusual Weather Phenomena

August 1994									
Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
Newport	09	1807EST			0	0	5	0	Thunderstorm Wind
A cold front moved slowly across Vermont during the night of August 9th with a severe thunderstorm moving across southern Lake Memphramagog causing damage in Newport. Thunderstorm winds tore part of the roof off a hardware store and caused extensive damage to a sports center, destroyed a boathouse and downed or uprooted numerous trees. In addition numerous signs were damaged and eight cars were destroyed as trees and signs fell on them.									
VIRGINIA									
Rockingham County Harrisonburg	05	1650EST			0	0	4	0	Thunderstorm Winds (G52)
A television station just west of the city of Harrisonburg on Route 33 reported 60 mph winds and a loss of power. Trees were blown down along Route 33 and into the city of Harrisonburg. A couple of cars received damage when trees fell on top of them. Hail of unknown size was also reported in Harrisonburg.									
Rockingham County Bergtons	11	1600EST			0	0	3	?	Hail (0.88)
Thunderstorm produced nickel-size hail and almost two inches of rain at Bergtons. Thunderstorm winds knocked down a couple of concession stands.									
Rappahannock County Countywide	11	1730EST			0	0	2	0	Thunderstorm Winds
Countywide	11	1800EST- 2100EST			0	0	2	0	Flood/Flash Flood
Trees down between Castleton and Laurel Mills. Heavy rains also caused roads to close with up to three feet of water across roadways.									
Shenandoah County Countywide	11	1730EST- 1930EST			0	0	3	0	Flash Flooding
Countywide	11	1845EST			0	0	2	0	Thunderstorm Winds
Over three inches of rain fell causing several roads just west of Mount Jackson to be closed. Trees were uprooted near Conicville and Route 703. Power was knocked out. Trees and lightning also knocked out power around Hamburg, Basye, and Broadway.									
VIRGINIA Cont'd									
Fairfax County	11	1840EST- 1900EST			0	0	2	0	Thunderstorm Winds
Thunderstorm winds blew several trees and limbs down which also caused power outages in the Burke and Springfield areas. Heavy rain also caused minor flooding along small streams and creeks in the western part of the county.									
Fairfax County Pohick	11	2000EST			0	0	5	0	Lightning
Lightning struck a home in the Pohick area starting a fire and causing \$250,000 damage.									
Culpeper County	11	2015EST- 2200EST			0	0	4	0	Flood/Flash Flood
Rappahannock County	11	2015EST- 2200EST			0	0	3	0	Flood/Flash Flood
Up to 5.50 inches of rain fell at Amissville near the Culpeper/Rappahannock County Line causing many roads to flood. Nine people had to be rescued from three homes in the northern part of Culpeper County. Stores flooded along the Lee Highway (Route 29) near Clevinger's Corner.									
Fauquier County W Portion	11	2045EST- 2200EST			0	0	3	0	Flood/Flash Flood
Over four inches of rain fell causing numerous roads to flood. Several people were rescued from cars caught on flooded roads south and west of Warrenton.									

Storm Data and Unusual Weather Phenomena

August 1994

August 1994									
Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
Fairfax County W Portion	12	0100EST- 0130EST			0	0	6	0	Lightning
Lightning started several house fires. One house fire started by lightning in Reston caused \$400,000 in damage. Another in Burke caused \$200,000 damage.									
Stafford County	14	1705EST			0	0	4	0	Thunderstorm Winds
Thunderstorm winds knocked down trees in the Quiet Harbor Subdivision in the northern part of the county. A chimney was ripped off a new home on Greensprings Drive in the Hampton Oak s Subdivision. Two other homes lost some siding and one home's roof was damaged when a tree fell on it.									
Prince William County Quantico	14	1715EST			0	0	3	0	Thunderstorm Winds
Thunderstorm winds downed a couple dozen trees and caused minor damage to several buildings on Quantico Marine Corps Base.									
Nottoway County Blackstone	14	2232EST			0	0	4	0	Lightning
Lightning set a house on fire in Blackstone causing 10,000 dollars damage.									
Henry County Martinsville	17	0142EST	4.25	300	0	10	7	0	Tornado(F2)
A tornado touched down just north of Ridgeway and moved to one and a half miles south o f Martinsville. The path length was 4.25 miles long and averaged about 200 yards wide. Ten people were injured, 100 homes and 30 businesses were damaged. Total damages came to \$8.7 million. The thunderstorm that produced the tornado was part of the remnants of Tropical Storm Beryl.									
Carroll County Cana	17	0330EST			0	0	4	0	Thunderstorm Winds
Carrol and Grayson Counties	17	Unknown			0	0	4	0	Flash Flooding
Seven inches of rain fell from thunderstorms associated with the remnants of Tropical Storm Beryl. High winds from the storms toppled trees and brought down branches knocking out power to some									
VIRGINIA Cont'd									
areas. Roads were flooded and several low bridges from high water. In Cana area of Carroll County, six large trees fell knocking out power to 500 customers.									
Louisa County	17	0800EST- 0930EST			0	0	2	0	Flood/Flash Flood
Almost three inches of rain fell in 24 hours as the remnants of Tropical Storm Beryl began to move into Virginia. One inch fell in less than an hour causing roads to go under water.									
Rockbridge County	17	0900EST- 1030EST			0	0	4	0	Flood/Flash Flood
Heavy rains from remnants of Tropical Storm Beryl caused numerous roads to go underwater. One family had to be evacuated from their home along Kerrs Creek just northwest of Lexington. Flood waters washed away a car. The driver was able to escape and scramble to higher ground.									
Bedford County	17	1100EST- 1300EST			0	0	2	0	Flood/Flash Flood
Amherst County	17	1200EST- 1400EST			0	0	2	0	Flood/Flash Flood
Heavy rains from remnants of Tropical Storm Beryl caused some roads to be closed from flooding streams and ponding of water.									
Highland County	17	1200EST- 0130EST			0	0	2	0	Flood/Flash Flood
Augusta County	17	1200EST-							

Storm Data and Unusual Weather Phenomena

August 1994

August 1994									
Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage	Character of Storm	
					Killed	Injured	Property	Crops	
		0130EST			0	0	2	0	Flood/Flash Flood
		Heavy rains from remnants of Tropical Storm Beryl caused flash flooding and the closure of roads in the western portions of Augusta County in the areas of Swoop, Augusta Springs, and Craigsville as well as the eastern portions of Highland County. About three inches of rain fell.							
Nelson County	17	1400EST-							
Albemarle County	17	1530EST			0	0	2	0	Flood/Flash Flood
		1400EST-							
Rockingham County	17	1530EST			0	0	2	0	Flood/Flash Flood
		1430EST-							
Greene County	17	1600EST			0	0	2	0	Flood/Flash Flood
		1430EST-							
Madison County	17	1600EST			0	0	2	0	Flood/Flash Flood
		1430EST-							
Page County	17	1600EST			0	0	2	0	Flood/Flash Flood
		1430EST-							
Rappahannock County	17	1600EST	1430EST-		0	0	2	0	Flood/Flash Flood
		1600EST			0	0	2	0	Flood/Flash Flood
		Two to four inches of rain from the remnants of Tropical Storm Beryl caused flooding of roads. Over four inches fell in Nelson County and four inches was reported at Luray in Page County.							
Shenandoah County	17	1500EST-							
		1630EST			0	0	4	0	Flood/Flash Flood
Warren County	17	1500EST-							
		1630EST			0	0	4	0	Flood/Flash Flood
Fauquier County	17	1530EST-							
		1700EST			0	0	3	0	Flood/Flash Flood
		Three and a half inches to five inches of rain fell over the area as the remnants of Tropical Storm Beryl moved through. Street flooding occurred in Front Royal. Many roads around Warren County were flooded. There were several mud and gravel slides that caused damage to roads and road closures. Over 20 roads were flooded in Shenandoah County. Two cars were caught in high water, but drivers escaped unharmed. A few basements also flooded. Roads were also flooded and closed in Fauquier County. Some roads were damaged by the flooding.							
VIRGINIA Cont'd									
Spottsylvania County									
Lake Anna	17	1525EST			0	0	0	0	Funnel Cloud
		A funnel cloud was sighted near Lake Anna. It did not touch down.							
Culpeper County	17	1530EST-							
		1830EST			0	0	2	0	Flood/Flash Flood
Orange County	17	1530EST-							
		2000EST			0	0	2	0	Flood/Flash Flood
		Three to five inches of rain from remnants of Tropical Storm Beryl caused flooding and several road closures throughout both counties.							
Clarke County									
Countywide	17	1615EST			0	0	2	0	Thunderstorm Winds
Countywide	17	1615EST-							
		1800EST			0	0	2	0	Flood/Flash Flood
Frederick County	17	1640EST-							
		1830EST			0	0	4	0	Flood/Flash Flood
		Three to five inches of rain from the remnants of Tropical Storm Beryl caused flash flooding in Winchester with up to a foot and a half of water on roads in the downtown area. Roads were closed near Greenwood and in other parts of both Clarke and Frederick Counties. Trees were blown down by thunderstorm winds near White Post in Clarke County.							
Loudoun County									
Countywide	17	1745EST			0	0	4	0	Thunderstorm Winds

Storm Data and Unusual Weather Phenomena

August 1994

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
Countywide	17	1805EST- 1930EST			0	0	2	0	Flood/Flash Flood
Thunderstorm winds blew down a tree which took out part of a bridge across the North Fork of Goose Creek. Heavy rains also caused flooding on portions of U.S. Route 15.									
Prince William County	17	1810EST			0	0	1	0	Thunderstorm Winds
Countywide	17	1900EST- 2000EST			0	0	3	0	Flood/Flash Flood
Trees were blown down by thunderstorm winds in the western part of the county. Heavy rain s produced flooding in the Dumfries and Sudley areas.									
Pulaski County	17	Unknown			0	0	?	?	River Flood
Grayson County	19	Unknown			0	0	?	?	River Flood
Several families had to be evacuated from their homes along the New River in Pulaski County . Bridges were closed in Grayson County. One trailer was washed away.									
Pittsylvania County	19	Afternoon			0	0	1	5	Hail (0.75)
White Oak Mountain	Marble to dime-size hail fell near White Oak Mountain for about 15 minutes damaging 100 acres of tobacco crops and causing crop losses estimated around \$175,000.								
Rockingham County	19	1945EST- 2100EST			0	0	5	0	Flood/Flash Flood
SW Portion									
Augusta County	19	1930EST- 2130EST			0	0	2	0	Flood/Flash Flood
NW Portion	Thorny Branch ran three to four feet over its banks from heavy rains associated with slow moving thunderstorms. Two or more inches of rain fell in just a couple hours on top of ground saturated by previous days rains. The K & M store in Sangerville flooded causing substantial damage to the store. Briery Branch in southwest Rockingham also flooded. Several roads were under water.								
Rockbridge County	25	1906EST			0	0	5	2	Thunderstorm Winds (G61)
Buena Vista	25	1906EST			0	0	3	0	Lightning
VIRGINIA Cont'd	A thunderstorm microburst hit three miles west of Buena Vista near the intersection of Route 608 and U.S. Highway 60. The area of damage was about 300 yards wide and half a mile long and was oriented from east-northeast to west-southwest. About 300 trees were snapped or uprooted. One home was damaged. Several properties had damage to sheds and one barn had the metal roof ripped off. Several cattle were killed by lightning from the storm. Microburst winds were estimated at 70 mph.								
Loudoun County	31	1645EST			0	0	2	0	Thunderstorm Winds
N Portion	Tree limbs were blown down by thunderstorm winds north of Leesburg. A pole was also blown down in the Purcellville area.								

WASHINGTON

Please refer to the second section of **Storm Data and Unusual Weather Phenomena .WEST**

WEST VIRGINIA, Eastern

Jefferson County	13	1445EST			0	0	2	0	Thunderstorm Winds
Harpers Ferry	Thunderstorm winds knocked down large branches, a tree and a telephone pole just southwest of Harper's Ferry. Hail also fell of unknown size.								
Pendleton County	17	1500EST-							

Storm Data and Unusual Weather Phenomena

August 1994

August 1994									
Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage	Character of Storm	
					Killed	Injured	Property	Crops	
		1600EST			0	0	5	0	Flash Flood
		Heavy thunderstorm rains from the remnants of Tropical Storm Beryl dropped 2.00 to 3.00 inches on parts of the county in a short amount of time. Low water bridges and secondary roads went under water. Two homes were washed away.							
Berkeley County	17	1615EST- 1830EST			0	0	2	0	Flood/Flash Flood
Jefferson County	17	1615EST- 1830EST			0	0	2	0	Flood/Flash Flood
Morgan County	17	1630EST- 1830EST			0	0	2	0	Flood/Flash Flood
		Heavy thunderstorm from the remnants of Tropical Storm Beryl dumped 3.00 to 4.00 inches of rain over the extreme eastern panhandle of West Virginia. Over 4.00 inches fell in Berkeley County. The heavy rains caused flash flooding of small streams and closures to flooded roads.							
Berkeley County	17	1640EST- 1645EST	2.0	100	0	0	5	0	Tornado(F1)
		A tornado touched down near Route 9 and Benspeck Road, a 0.25 of a mile west of Hedgesville. The tornado damaged three homes partially destroying one. It destroyed a shed and uprooted some large pine trees. The path length was estimated at 2 miles long and 100 yards wide.							
Morgan County 1.5E Paw Paw	17	1515EST- 1520EST	3.0	100	0	0	2	0	Tornado(F0)
		A small tornado touched down about a mile and a half northeast of Paw Paw, WV and moved to the northeast along the southeast side of the Potomac River. It caused widespread tree damage through a very rural area. Path length was about three miles long and width was about 100 yards.							
Berkeley County Martinsburg	25	1802EST			0	0	2	0	Thunderstorm Winds
		Trees and power lines were knocked down in the Martinsburg area . The strongest measured wind was 42 mph with pea-size hail.							
WEST VIRGINIA, Eastern Cont'd									
Berkeley County Martinsburg	31	1800EST			0	0	2	0	Thunderstorm Winds
		Trees and power lines were knocked down in the Martinsburg area . The strongest measured wind was 42 mph with pea size hail.							
WEST VIRGINIA									
Brooke County Wellsburg	02	1545EST			0	0	3	0	Lightning
		A fire was ignited on an apartment building's roof. Smoke and water damaged dwellings below.							
Marion County Rivesville	02	1630EST			0	0	0	0	Thunderstorm Wind
Monongalia County Arnettsville	02	1650EST			0	0	3	0	Thunderstorm Wind
Marion County 1 N Rivesville	02	1630EST- 1900EST			0	0	3	0	Flash Flood
Monongalia County Arnettsville	02	1630EST- 1900EST			0	0	4	0	Flash Flood
		Pharaoh Run and Indian Creek flooded after 1 to 3 inches of rain fell in about an hour. Outbuildings and vehicles were damaged.							
Ohio County									

Storm Data and Unusual Weather Phenomena

August 1994

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
Wheeling Airport Lewis and Upshur Counties	04	1803EST			0	0	0	0	Thunderstorm Wind (G52)
	05	1000EST- 1200EST			0	0	3	0	Flood/Flash Flood
Rains of 2 to 4 inches fell in 12 to 18 hours. Small stream flooding in Lewis County occurred from the Vadis region on east to Weston and Jane Lew. Water surrounded 3 or 4 homes on the outskirts of Weston. In Upshur County, creeks overflowed around Buckhannon and Tennerton.									
Monongalia and Preston Counties	17	1600EST- 1800EST			0	0	3	0	Flood/Flash Flood
	Rains of 2.5 to 3.5 inches accumulated in 24 hours brought several creeks over county roads. Preston County officials reported 4 to 8 inches of water flowing across numerous roads.								
Summers County Nimitz Green Sulphurr Springs Marshall County Moundsville	19	1406EST			0	0	0	0	Hail 0.75
	19	1425EST			0	0	0	0	Hail 0.75
Lynn Camp	25	1730EST			0	0	3	0	Thunderstorm Wind
	Numerous trees and power lines were blown down. The roof of an apartment building was damaged causing water to leak into units below.								
Wetzel County New Martinsville New Martinsville	25	1815EST- 1845EST			0	0	0	0	Flash Flood
	An automated rain gauge indicated 3.8 inches of rain in 45 minutes. County officials reported flooded roads.								
Tyler County Deep Valley	25	1900EST			0	0	0	0	Hail 0.75
	25	1910EST			0	0	4	0	Thunderstorm Wind
A construction trailer was blown over, along with several large tree branches. A house on Third Street sustained damage from a fallen maple tree.									
WEST VIRGINIA, Eastern Cont'd									
Tucker, Barbour, Randolph, Upshur, and Webster Counties	27	0730EST- 0830EST			0	0	3	0	Flash Flood
	Rains of 1.5 to 2 inches fell in 3 hours. Many small creeks overflowed onto roads. Mudslides also blocked roads. No dwellings were affected.								
Harrison County Stonewood Nutter Fork Lewis and Harrison Counties	31	1400EST- 1500EST			0	0	3	0	Flash Flood
	31	1815EST- 1915EST			0	0	4	3	Flash Flood
One to 2.5 inches of rain fell over saturated ground. A small bridge over Elk Lick Run, along the Right Fork of Freemans Creek was destroyed in Lewis County. Water flooded roads from Lost Creek to Johnstown in Harrison County. Harrison County officials estimated 50 homes had minor water damage. No structural damage or evacuations were reported. High water flooded fields and ruined hay.									

WISCONSIN

Please refer to the second section of **Storm Data and Unusual Weather Phenomena**.

WYOMING

Please refer to the second section of **Storm Data and Unusual Weather Phenomena**.

Storm Data and Unusual Weather Phenomena

August 1994

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
ALASKA, Northern									
AKZ024	10	0530ADT			?	?	?	?	High Winds
A strong storm occurred southwest of Gambell.									
AKZ005	11	1600ADT			0	0	0	0	Coastal Flood
A storm southwest of St. Lawrence Island moving northward into Chukchi Sea continuing northward. Several small boats swamped in fishing camp.									
AKZ024	13	0253ADT			?	?	?	?	High Winds
Strong pressure gradient north of strong occluded front moving northward.									
AKZ005 Z006	16	0012ADT			0	0	?	?	Flash Flood
A strong front in the Bering Sea moved northward over the Seward Peninsula causing nearly 2 inches of rain. The Snake River near Nome went over bankfull and into Residence.									
AKZ004-005	17 26	1600ADT-			0	0	?	?	River Flood
From the 17th to the 21st major river flooding occurred on the Koyukuk, Kobuk, and Noatak Rivers. The cause of the floods was a series of strong Polar frontal systems moving through on a moist southwesterly flow off the Bering Sea. The first flood subsided on the 21st but further rainfall caused more flooding on the same rivers through the 26th. The total estimate for restoration of the flooded villages on the rivers is \$74 million.									
AKZ007	18	2322ADT			?	?	?	?	High Winds
Some trees and power lines were downed. Power outages occurred and damage estimates unknown.									
ALASKA, Southern									
Report not received.									
ALASKA, Southeastern									
Report not received.									
HAWAII									
Hawaii HIZ004	12	1215HST			0	0	6	?	Flash Flooding
Moisture transported into the Big Island from the outer shower bands of Tropical Depression 1-C, and enhanced by upslope flow, produced heavy showers and thunderstorms over the Hamakua, Hilo, Puna, and Kau Districts. Although 7 to 15 inches of rain fell in 24 hours over parts of the Hilo and Puna Districts, given the extreme runoff, greater rainfall likely occurred in ungaged areas at higher elevations of both districts. Flooding was characterized by some Hilo residents as the worst in over 40 years. At the height of the flooding, all major roads were closed in Hilo. Of an estimated \$3.4 million in total damage, roads, culverts, bridges, and businesses accounted for \$1.8 million. Two homes were destroyed, 14 suffered major damage, and 200 had minor damage.									
Maui HIZ003	12	1200HST			0	0	?	?	Flash Flooding
Isolated showers and thunderstorms associated with instability from Tropical Depression 1-C caused flooding over parts of East Maui. The Hana Highway was blocked by landslides and flooding at several locations.									
Hawaii HIZ004	23	1800HST			0	0	?	?	Flash Flooding
Heavy showers over upslope areas caused heavy runoff and road closures in the Kau District.									
	23-24				0	0	0	0	High Surf
High surf associated with swell from distant Hurricane John ranging from 6 to 10 feet inundated beach parks in Kau and Kona Districts. High water closes Alii Drive in Kona.									
Oahu HIZ002	1-31				0	0	0	0	Excessive Heat
Maximum temperatures hit 90F and above on all but one day at Honolulu International Airport. 13 daily record highs were tied, and 3 new daily record highs were set. Ten new record high minimums									

Storm Data and Unusual Weather Phenomena

August 1994

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

were established and 5 record high minimums were tied. A new record high minimum of 80F was set for the month of August.

PACIFIC

Johnston Atoll	25	1630HST			0	0	7	0	Hurricane John
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Hurricane John makes a 15 mile closest point of approach to the north northwest of Johnston Island, with 75 mph sustained winds and gusts to 90 mph. Although buildings and storage areas containing a chemical weapons disposal facility and toxic waste were undamaged, \$10-15 million in damage occurred to numerous support buildings and personnel billets. All 1100 civilian and military personnel were evacuated well in advance of John's approach. Many of the approximately 2,000 nests of seabirds on the island and 3 smaller islets in the atoll were destroyed.

PUERTO RICO

Arecibo	01	1530AST			0	0	0	0	Thunderstorm Winds Hail
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Thunderstorms produced hail of unknown size at the Sabana Hoyos sector.

Moca	11	1530AST			0	0	4	0	Thunderstorm Winds
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Trees and power lines were downed by thunderstorm winds in the town of Moca. One tree fell on a mechanic shop destroying the shop and two vehicles inside. At Barrio Voladora a tree crashed down on a bakery damaging the roof. A landslide was also reported along route 464.

PRZ002	23	1305AST			0	0	0	0	Waterspout
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A waterspout was sighted by an aircraft 7 miles southwest of Culebra in eastern Puerto Rico. Additional waterspouts were sighted by aircraft near Culebra later in the afternoon.

Anasco	28	1500AST			0	0	3	0	Urban/Small Stream Flood
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More than two inches of rain fell in Anasco. Several houses in the Vista del Rio Dos housing area at Barrio Carrazas were flooded when a nearby stream overflowed its bank.

PUERTO RICO Cont'd

PRZ001- 002-003- 004-005-	01-31				0	0	0	0	Drought
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Islandwide drought continued across Puerto Rico. Dry soils covered 40% of the island. Saturated soils covered 5% of the island. La Plata reservoir water level was forty-nine feet below spillway. Carraizo reservoir water level was eighteen feet below spillway, although during the second week the Carraizo reservoir level dropped to its lowest elevation of twenty-four feet below spillway.

VIRGIN ISLANDS

Report not received.

Storm Data and Unusual Weather Phenomena

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage Property - Crops	Character of Storm
					Killed	Injured		

August 1994

ADDITIONS AUGUST 1993

MISSOURI

MOZ003-007-011-012-018-022-023 Northeast through Southeast Missouri	01-31	0	0	9	9	River Flood
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Note: The numbers in the damage category columns above are a continuation from previous months and not a total for August.

The Great Flood of '93 continued into its second month in Missouri as the **Mississippi River** remained above flood stage at all points along the river. In fact, some of the record crests were reached in the first two weeks of the month.

Site	Flood	Stage	Record	Date	Old Record	Date
Grafton, IL		18	38.15	8/1	33.12	4/73
Melvin Price Dam		26				
Alton, IL		21	42.72	8/1	36.6	4/73
St. Louis, MO		30	49.58	8/1	43.2	4/73
Chester, IL		27	49.69	8/7	43.3	4/73
Cape Girardeau, MO		32	48.49	8/8	45.55	5/73
Thebes, IL		33	45.5	8/7	44.2	5/83

For the most part, August marked a slow recession in the levels of the Mississippi River at points in Missouri. The following is a capsule of how the affected counties continued to deal with the disaster.

Clark County

On Tuesday (8-3-93) the Mississippi River continued to ebb in Clark County. North of Taylor, Highway 61 was still under water and closed to the Iowa border. By Sunday (8-8-93) floodwater slipped off Highway 61 from Alexandria to the Des Moines River bridge. However the highway remained closed due to needed repairs. The entire town of Alexandria was flooded with up to 14 feet of water July 7 and the town still had 4 feet of water remaining on August 9. Officials in Alexandria Thursday (8-26-93) reported that only 12 of the 120 homes had flood insurance. Alexandria roads were still covered with water August 28, but most could be traveled by four-wheel drive vehicles.

Lewis County

In LaGrange Sunday (8-1-93) the police chief reported the Mississippi River had receded from the Post Office and Police station. It appeared though that the police station, many businesses and homes were too damaged to repair. Business Highway 61 through Canton and LaGrange was still closed August 9. In LaGrange Thursday (8-26-93) the mayor reported that about 50 pieces of property had been damaged. So far only two properties had been condemned. Nineteen of the properties were insured. On Saturday (8-28-93) Main Street in LaGrange was dry as the river retreated to just below the Burlington - Northern railroad track.

In Canton Monday (8-2-93) sandbags were removed as the threat of flooding diminished. Canton officials said Sunday (8-8-93) that none of the 450 homes and businesses evacuated had been flooded, because the Canton levee held. In Canton, one home on the river side of the levee had been condemned.

MISSOURI Cont'd - August 1993

Storm Data and Unusual Weather Phenomena

August 1994									
Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage	Character of Storm	
					Killed	Injured	Property	Crops	

Marion County

On Sunday (8-1-93) Highway 61 was opened from Taylor to Hannibal. In the Bear Creek Bottoms area in southern Hannibal, floodwater receded leaving behind driftwood, garbage and lots of muck. The Highway 24 bridge north of Hannibal leading to Quincy, Illinois remained closed. Officials in Hannibal Thursday (8-26-93) reported 150 homes and businesses were damaged by the flood. Fewer than 10 buildings had flood insurance. The city had already condemned 63 homes. In Hannibal on Friday (8-28-93) floodwater no longer claimed any ho use in the Bear Creek Bottoms. More than half of the 150 damaged homes and businesses may have to be condemned.

Ralls County

Ralls County officials estimate there were 50 homes damaged in the Ilasco, Saverton and Riverview Acres areas. Several hundred acres of farm land were also flooded.

Pike County

The Mississippi River fell rapidly (11/2 feet) at Louisiana Monday (8-2-93) but Highway 79 remained flooded. On Thursday (8-5-93) the Louisiana City Administrator advised that the U.S. 54 bridge approach on the Illinois side of the Mississippi River may be repaired by early next week , making the bridge useable. Pedestrians were allowed to cross the bridge. At 6 P.M. Saturday (8-7-93) the U.S. 54 bridge to Pike County Illinois was reopened. Illinois had closed the bridge July 1, 1993.

On Saturday (8-7-93) Clarksville's sewer plant serving the downtown area returned to service . Clarksville had 41 homes and 2 businesses flood damaged. On Thursday (8-26-93) officials reported Louisiana had 30 homes and 12 businesses flood damaged.

In the small community of Annada in extreme southeast Pike County all the homes were flood d damaged.

On Saturday (8-28-93) the river rose back across Highway 79 in both Louisiana and Clarksville, but it was not expected to stay there for long.

Lincoln County: Mississippi River, Cuivre River

Highway 79 was reopened south of Foley through Lincoln County and St. Charles County Sunday (8-8-93). Thursday (8-26-93) the Lincoln County Emergency Management Agency (EMA) Chief said 800 homes were damaged or destroyed by the flood.

Officials in Elsberry said Monday (8-2-93) the floodwater had dropped a foot exposing a smal l portion of Highway 79 in town.

A boil water order was in effect in Winfield due to a power outage the night of August 2, causing problems with the purification plant. In Winfield residents began cleaning up the 115 flooded homes east of the Burlington - Northern Railroad tracks on Saturday (8-28-93).

In Old Monroe the floodwater from the Cuivre and Mississippi Rivers dropped a few inches over the weekend of August 1st but it was still up to the Burlington and Northern railroad tracks.

St. Charles County: Mississippi River, Missouri River, Cuivre River

A St. Charles County spokesperson for the EMA said 123,000 acres had been flooded in the county as of Wednesday (8-3-93). There were 30 breaks in various levees in the county, with each break averaging 500 feet. With only one of four bridges fully open, commuter traffic from St. Charles into St. Louis County was horrendous. The City of St. Charles suffered near total gridlock early Monday (8-2-93). The Missouri Highway 94-370 interchange reopened Sunday (8-8-93) after being closed for a week. Traffic using the Highway 370 Bridge over the Missouri River helped relieve th e massive traffic jams that occurred on Interstate 70 at the Blanchette Bridge. Highway 67 and th e Clark Bridge connecting St. Charles County to Alton, IL was reopened Saturday (8-7-93).

MISSOURI Cont'd - August 1993

Storm Data and Unusual Weather Phenomena

Location	Date	Time	Path	Path	Number of		Estimated	August 1994	
		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Injured	Damage Property - Crops	Character of Storm	

Highway 79 in north St. Charles County was reopened Sunday (8-8-93). As of Wednesday (8-25-93) officials reported that flooding chased 10,000 residents from 3,500 homes in St. Charles County. Nobody knows yet how many people can or will return.

The Missouri and Mississippi Rivers spared only 2 of the 240 farmers who work the land between the two rivers. The affected farmers survivability depends on levees being rebuilt and also on Departmental and Federal Regulations involving use of the flood plain. The St. Charles County Sheriff estimated that because of the flood \$178,000 had been paid for overtime. St. Charles County inspectors by Saturday (8-28-93) had inspected 600 of the estimated 2,000 to 4,000 flooded homes in the county. Around 1/3 of those inspected have been condemned.

On Sunday (8-1-93) the marooned town of Portage Des Sioux lost its link to the outside world when 3 feet of water poured into the Southwestern Bell office. All but 6 of the village's 150 homes had water above their living room floors.

North of St. Charles on Sunday (8-1-93) about 1:30 A.M. the Missouri River shoved aside a 2 foot wall of sandbags topping a levee near Highway 94. The breach stretched more than 500 feet flooding more than 400 homes and 40 businesses in northern St. Charles. The river also washed over the Katy Trail and cascaded off a cliff to partly fill a quarry just south of St. Charles.

On Monday (8-9-93) Highway 94 remained under water north of Fox Hill Road in St. Charles County. North Main Street in St. Charles remained closed from Tecumseh to the St. Charles City limits. In St. Charles city, officials first estimate of the damage to public roads and facilities was \$500,000.

On Monday (8-2-93) highway workers dumped gravel into low spots on Highway 94 near Orchard Farm. This action opened the roadway to the residents that had been locked in since the weekend. The Orchard Farm school was surrounded by floodwater but a sandbag levee and pumps kept the school dry. The Orchard Farm school district resumed classes August 25. Only 10% of the district stayed dry during the flood. Only 963 students registered by the August 13, deadline. The district expected about 1,400 students.

Highway 94 at Defiance in southern St. Charles County remained closed until August 30. However Highway 94 remained closed in northern St. Charles County from east of Portage Des Sioux through West Alton as of August 31.

St. Louis County: Mississippi River, Missouri River, Meramec River, River Des Peres

On Monday (8-2-93) four major bridges in the St. Louis area remained closed, knotting traffic in the morning and afternoon rush hours into some of St. Louis' worst jams ever.

Westbound lanes of Highway 40 over the Daniel Boone Bridge over the Missouri River connecting St. Louis and St. Charles Counties was reopened Wednesday at 2 P.M. (8-11-93). Water covered the eastbound lanes for a half mile in the eastern portion of the Chesterfield Valley. Over 46,000 vehicles use the Daniel Boone bridge daily. That traffic had been forced north to add to the massive traffic jams on Interstate 70 and the Blanchette Bridge. On Friday afternoon (8-13-93) the Highway 40 westbound lanes were closed after a mid-week downpour caused the water to rise again and cover the lanes with up to 10 inches of water. On Sunday (8-15-93) about 3 P.M. the westbound lanes of Highway 40 reopened Early Monday (8-16-93) afternoon the eastbound lanes of Highway 40 reopened through Chesterfield Valley. The exits at Chesterfield Airport Road and Long Road remained closed due to floodwater and security restrictions. The Monarch Levee District began work repairing the 13 mile levee system, primarily at the 1,800 foot break near Howell Island.

Thursday (8-19-93) the Army Corps of Engineers announced that the Monarch Levee in Chesterfield was one of its two highest priority repair projects on the Missouri River. The broken levee leaves nearly 500 businesses, an airport, a prison and Interstate 64/U.S. 40-61 unprotected from future flooding.

In Chesterfield, police arrested anyone who violated an order issued August 2, to keep out of the business district which was covered by up to 15 feet of water. The Chesterfield Mayor said Saturday (8-21-93) that about 38 homes were flooded in the Chesterfield Valley as a result of the

MISSOURI Cont'd - August 1993

Monarch Levee in late July. On Tuesday (8-24-93) Federal Aviation Administration officials advised

Storm Data and Unusual Weather Phenomena

August 1994									
Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

they will be returning the Automated Flight Service Station to the Spirit of St. Louis airport located in Chesterfield Valley.

County officials estimate nearly 200 homes in the county could meet the federal 50 percent damaged criteria for condemnation. About 85 of these homes are in the Lemay area.

The Aviation Museum located at Creve Coeur Airport needed a minimum of \$250,000 in donations to repair the flood damaged exhibits. Prior to the Creve Coeur levee break on July 17 many of the exhibits were moved to Spirit of St. Louis Airport which was flooded by a levee break July 30.

The St. Louis County Chief Accountant said Sunday (8-22-93) that flood expenses for all County Departments were approximately \$1.5 million.

In Bellefontaine Neighbors the water started to fall by August 2. 51 homes were flooded by a creek backed-up from the swollen Mississippi River. Some homes were flooded up to their rooftops.

Tuesday (8-3-93) the City of Arnold Mayor said the bridge over the Meramec River at Telegraph Road and the approach on U.S. 61-67 will have to be replaced and raised. As of Wednesday (8-4-93) 130 homes in Arnold were flooded.

Saturday (8-21-93) officials advised that water has left all 80 homes that had been flooded in the Lemay area, but home owners must wait for inspections of their homes before returning to them. County inspectors determined Saturday (8-28-93) that 81 homes in the Kayser Creek area of Lemay were damaged over 50%. They estimate that 90% of the 120 homes damaged in that area will be at least 50% damaged.

St. Louis City: Mississippi River, River Des Peres

Police ordered nearly 12,000 residents to evacuate an area within a one mile radius of the Phillips Petroleum Company's Propane distribution center August 2. There were 51, 30,000 gallon propane tanks bobbing in the floodwater along the River Des Peres, a small tributary of the Mississippi River. This created a threat of a fireball from a propane gas explosion. The area affected was in the city of St. Louis and St. Louis County north and south of where the River Des Peres enters the Mississippi River.

The Mississippi River crested at St. Louis at 9 A.M. Sunday (8-1-93) at 49.58 feet, flood level is 30 feet. On Tuesday (8-3-93) the 51 propane tanks at the Phillips Petroleum Company yard settled back into their concrete saddles, as floodwater receded. Divers had been used to secure them in place. The evacuation area for the propane tank hazard was reduced Friday (8-6-93) from a 1 mile radius to a 1/2 mile radius of the tank farm. The flood and the danger of an explosion at the flooded propane facility forced 17,000 people from their homes. On Saturday (8-7-93) the residents living within 1/2 mile down to 1000 feet of the propane tank farm were allowed to return to their homes. On Wednesday (8-11-93) all remaining residents in this area were allowed to return since all the propane tanks had been secured and drained.

Two barges, one carrying a Burger King restaurant, and a World War II minesweeper broke loose from their moorings on the Mississippi Riverfront at 11 P.M. Monday (8-2-93). The Burger King barge crashed into the Poplar Street Bridge (the major bridge carrying the Interstate Highways across the Mississippi River). The bridge had to be closed for about 6 hours as inspectors looked for structural damage. The Burger King restaurant was destroyed. The minesweeper was rounded up by a couple of tugboats shortly before it would have struck the St. Louis floodwall. It was moored to a point nearby where it later sank.

On Wednesday (8-18-93) the St. Louis Assistant Police Chief told the Police Board that the department had spent \$2 million on flood related matters.

The Defense Mapping Agency's flood damaged Aerospace facility in south St. Louis was still closed. The facility closed July 31 due to flooding of the River Des Peres and the Mississippi River. Most of the 1000 employees had been reassigned to other agency sites in St. Louis. The Public Affairs officer said this facility could be moved to a new site in the St. Louis area or be moved somewhere else in the state.

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Storm Data and Unusual Weather Phenomena

Location	Date	Time	Path	Path	Number of		Estimated	Character of Storm
		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Injured	Damage Property - Crops	

August 1994

Jefferson County: Mississippi and Meramec River

In Jefferson County On Monday (8-9-93) Missouri Highway 231 and part of Highway 61-67 remain closed. On August 29, officials declared the Telegraph Road bridge on Highway 231 over the Meramec River joining St. Louis and Jefferson counties damaged beyond repair.

In Arnold (where the Meramec meets the Mississippi) a 20 foot section of a sandbag levee collapsed at 7:15 A.M. Sunday (8-1-93) flooding 10 mobile homes in the Starling Community Mobile Home Park on Starling Airport Road. Backed up sewers and a creek that feeds the Meramec River also flooded Starling Airport Road. In Arnold many residents were advised to evacuate in late July. However levee breaks on the Illinois side of the Mississippi River proved to be a blessing as this caused a 2 foot drop along the Meramec River. By Saturday (8-28-93) the Arnold City Administrator said federal buyouts have included 94 buildings and a mobile home park.

In Kimmswick on Sunday (8-1-93) sandbaggers worked to raise the levee along the Mississippi to 51 feet. Access south of Kimmswick was cut off early Monday (8-2-93) when Highway 67 flooded.

In Festus/Crystal City Sunday (8-1-93) part of a downtown Festus levee along the Mississippi fell to floodwater. Flooded were law offices, a hair salon, a restaurant, an insurance agency, a trophy store and a pawn shop. However broken levees upstream on Monday (8-2-93) caused the water level to drop 1 foot overnight. A boil order was still in effect in Crystal City. Also in Crystal City sandbags failed to keep floodwater off of South Truman Boulevard.

Festus town officials said Thursday (8-26-93) that 19 homes, 30 businesses and a church were flood damaged. In Crystal City 25 homes were damaged.

Ste. Genevieve County

On Sunday (8-1-93) at Ste. Genevieve, the Valley Branch Levee broke south of town spilling water onto St. Mary's Road and into St. Jude Acres subdivision. About 50 homes and businesses were evacuated. On Monday (8-2-93) authorities ordered another 20 families to leave, fearing the Mississippi River would conquer levees protecting their homes. Ste. Genevieve officials said Thursday (8-5-93) that muddy floodwater had damaged three of the town's eight most historic French Colonial buildings including the Amoureux House built in 1770. The sandbag levee that towered over Front Street held with only a little seepage. Flood water broke through two small levees along a swollen creek in town.

The Mississippi River at Ste. Genevieve crested Friday (8-6-93). The levees at Ste. Genevieve held with only minor leaks. About 450 homes and businesses were forced to evacuate because of flooding or the threat of flooding. Saving the Ste. Genevieve historic buildings cost about \$2 million for sandbagging, rock and overtime. This expense was about \$300,000 more than their annual budget. Ste. Genevieve officials on August 26 said they expect several businesses and some homes to be condemned because of flood damage.

Perry County

On Friday (8-6-93) in Perry County, near McBride, cranes unloaded 2000 tons of rock from two barges sent by the Army Corps of Engineers. The rock was used to shore up a three mile stretch of sagging levee along the Mississippi River. Officials say this rock may be "a little late" as most of the resources, up to now, had been going to Ste. Genevieve. The problem had been aggravated due to the July 25 break in the southern portion of the levee surrounding Bois Brule Bottoms. River water poured into the valley, saturating the remaining levee. This break submerged the approach to the Chester, Illinois bridge. The Perry County Sheriff reported 26,000 acres flooded in Perry County.

Tuesday (8-10-93) officials reported the water behind the Bois Brule Levee had been dropping a foot a day but it had 16 feet to go before it exposes the road to the Chester Bridge across the Mississippi River. On Saturday (8-21-93) the Perry County Sheriff reported that 8 feet of water still covered the road to the Chester Bridge. Thursday (8-26-93) officials report 90 buildings including two major businesses were flooded in the Bois Brule Bottoms. Saberliner Aircraft Repair and Gilster - Mary Lee Corp will probably return. Homeowners in several unincorporated villages may not be able to return according to Federal guidelines. Saturday (8-28-93) officials estimate that

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nearly 5 feet of water still covered the Highway 51 approach to the Chester bridge. The bridge

Storm Data and Unusual Weather Phenomena

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Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

appeared undamaged.

Cape Girardeau, Scott, Mississippi, New Madrid, Pemiscott Counties

These Southeast Missouri counties primarily had flooding restricted to agricultural lowlands near the Mississippi River. These rich farmlands remained underwater through August.

MOZ001-004-005- 006-008-009-010- 011-012	01- 31				0	0	9	9	River Flood
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Northwest through Central
to East Central Missouri

The Great Flood of '93 entered its second month along the **Missouri River**. For most areas, August was a month of falling water levels, with some areas experiencing increases late in the month.

One record crest was reached in August along the Missouri River. That occurred at St. Charles near the confluence with the Mississippi River. The Missouri crested at St. Charles on 8/2 at 39.6 feet. Flood stage is 25 feet. The previous record had been set in July of 1986 at 37.5 feet.

Northwest Missouri

Areas from Kansas City on north, including the communities of St. Joseph, MO and Atchison KS, saw the river fall to flood stage by August 8. This allowed the massive clean-up to begin.

Drinking water returned to St. Joseph, MO (Buchanan County) residents. The water treatment Plant had been shut down on 7-24-93 due to flooding from the river. St. Joseph Rosecrans Airport also suffered major damage keeping it out of service for much of August. Agricultural lowlands remained under water, in many cases because the flood water was trapped and could not return to the river. Tons of sand left behind will make this land useless for several years to come.

In areas just east of Kansas City, including Ray, Lafayette and Carroll Counties, the river stayed above flood stage for most of the month. The river reached flood stage at Napoleon on 8-27-93, and in Waverly on 8-28-93, both in Lafayette County. Much of the damage in these areas was to agricultural lowlands, although the U.S Highway 24/65 bridge at Waverly suffered extensive damage.

Central Missouri

In central Missouri, the Missouri River also slowly returned to its banks. The river returned to flood stage on 8-17 at Glasgow, Howard County; on 8-19 at Jefferson City, Cole County; on 8-24 at Booneville, Cooper County; and on 8-25 at Hermann, Gasconade County.

The falling water enabled some much needed bridges and highways to re-open. This included the Highway 5 Bridge at Booneville, the Highway 240 Bridge at Glasgow, and the U.S 54/63 Bridge at Jefferson City. The retreating water also revealed the damage done to roadways. The north bound lanes of U.S. 54/63 looked as if they had been bombed, with huge chunks of concrete displaced or missing completely.

East Central Missouri

Franklin County

On Sunday (8-1-93) residents of Washington were under a boil order for possible water contamination. An exposed water main broke Sunday when floodwater eroded the dirt from a tree's roots causing it to fall on the pipe. Service was restored late Sunday and the boil order was canceled Wednesday.

The Rock Levee at New Haven held fast as the Missouri River crested Monday (8-2-93) at 36.8 feet, just inches below the 37 foot levee. Gas service to New Haven was cut off Friday (8-6-93) after a submerged gas line malfunctioned.

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The Missouri Highway Patrol reopened the Highway 47 bridge north of Washington Monday (8-23-

Storm Data and Unusual Weather Phenomena

August 1994									
Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

93). The Washington City Administrator on Saturday (8-28-93) said the Washington Riverfront Park emerged from the floodwater unscathed. But he said 8 homes were heavily damaged and river water entered an additional 10 homes through their sewers.

Warren County

The Missouri Highway 47 Bridge, Highway 47 and Highway 94 in Warren County, north of Washington, remained closed until Monday (8-23-93). Washington Memorial Airport was reopened for daylight operations only on August 24.

St. Charles and St. Louis Counties

For information on flooding in these counties from the Missouri River see the entries for these counties in the section covering the Mississippi River. (August 1993 Storm Data Issue, Vol.35, Number 8.)

SEPTEMBER 1993

ILLINOIS

MOZ007-012
West Central
through Southwest
Illinois

01-31	0	0	9	9	River Flood
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NOTE: Information for Randolph County (Illinois Zone 13) is also included. Damage listed above is a continuation for the flood, not a one month total.

The Great Flood of '93 continued into its third month. The **Mississippi River** did fall below flood stage at Quincy, Illinois on 9/13, however it rose back above flood stage from 9/15 - 9/17. At points below Quincy, namely areas adjacent to Hannibal, MO, Clarksville, MO, Winfield, MO, Grafton, IL, St. Louis, MO, Cape Girardeau, MO, Chester, IL, and Thebes, IL, the river remained above flood stage the entire month of September. At points north of Grafton IL, the river ranged from 1 to 3 feet above flood stage during the month.

However at points from Grafton to Chester, IL, the river surged late in the month from 10 to 15 feet above flood stage. The late month surge in water levels was mainly caused by heavy rain that fell in central Missouri that flowed down the Missouri River and then into the Mississippi River just north of St. Louis.

In the areas north of Grafton IL, life finally began to return to normal. Roads and bridges that had been closed for as long as two months were reopened. The clean-up began in earnest, but for many, there was nothing left to clean-up. Talk began of moving whole towns out of the floodplains. Many residents of Grafton, IL, were looking to the bluffs to their north and east as their future home. The town of Valmeyer, in Monroe County, also began work on moving the entire town east to higher ground.

South of St. Louis, the water remained too high to begin cleaning up. Much of the land flooded in Monroe and Randolph counties remained inaccessible. Levees that had failed earlier could not be repaired in time to stop the late September rise. The bridge across the Mississippi at Chester, IL remained closed. Kaskaskia Island remained a part of the river. Surveys of the island done by boat found that only 5 of the 162 houses remained in one piece.

SEPTEMBER 1993

Storm Data and Unusual Weather Phenomena

August 1994

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

MISSOURI

MOZ006-007-009- 010-011-012-014- 016-017-018-022- 023	22- 30				1	0	7	0	River Flood
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**Central through East Central
to Southeast Missouri**

Heavy rain during the third week of September extended or brought renewed flooding to Central and East Central Missouri. Some of the rivers affected included the **Mississippi, Missouri, Meramec, Osage, Big, Gasconade, Bourbeuse, and Cuivre**. Fortunately, no new records were set and most of the smaller rivers were only in flood for about 1 week.

On the **Mississippi River**, most points remained above flood stage through the month, although water levels for the most part dropped to near flood stage. At Quincy, IL, the river fell to flood stage on 9/13, rose briefly above on 9/15, then was back down on 9/17. At Hannibal, MO, the river hit flood stage on 9/21, was above on 9/23, back down on 9/24, and above again on 9/27. At St. Louis, the river hit flood stage on 9/13, but was back up on 9/15. The Mississippi remained above flood stage through the month in southeast Missouri. The primary problem there was flooded roads and farmland in the river bottoms.

The **Missouri River** suffered the most as the majority of the rain fell directly into the river or in tributaries of the river. Since most of the levee system was damaged or destroyed, water easily flowed back into the river bottoms. Following is a brief summary of how some of the counties in central and east Missouri were affected by the Missouri River.

Cole County

Flood water covered the runways at the Jefferson City Memorial Airport and damaged the runway lights. Water covered the parking lots in the river bottoms around the Truman Building and Capitol Building in Jefferson City. In Osage City a combination of water from the Missouri River and the **Osage River** flooded River Front Road and Lilestown Road along with several homes and businesses.

Boone County

Flooding occurred on part of Second Street in Hartsburg but no houses were affected.

Callaway County

Flooding occurred on the southbound lane of U.S. Highway 63 just east of Jefferson City. Flooding also occurred over parts of highway 94. Flooding of county roads was most severe on those which intersect the **Auxvasse Creek**. Water rose into a few homes and businesses in Mokane and Portland and produced minor damage to those structures.

Osage County

Flooding occurred along highway 100 west of Chamois and between Chamois and Morrison. County roads close to the river in the bottoms were affected. Water reached several river cabins near Bonnots Mill.

Montgomery County

Flooding occurred on Highway 19 near McKittrick.

Gasconade County

The Highway 19 bridge was cut off and water covered part of Gutenberg Street in Hermann. No businesses or homes were flooded.

Howard County

Rapidly moving flood waters covered Highway 40 from the intersection of Highway 5 south to the Missouri River. An 80 year old man drowned on the 24th in this area when the force of the river current pushed his pick-up truck off the highway. Also on the 24th, a 73 year old man lost control

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of his pick-up truck 9:00 pm on the same road. He abandoned the vehicle and managed to

Storm Data and Unusual Weather Phenomena

August 1994									
Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
									grab hold of a tree as he floated down the river. Law enforcement eventually rescued him around 7:00 am the following morning.
Moniteau County									Highway 179 at Sandy Hook was flooded and water rose into several houses.
Cooper County									Flood water partly covered Water Street in Boonville.
Chariton County									Flooding occurred along highway 40 from downtown Brunswick west to Highway 11 and the county line. At least 12 businesses in Brunswick on the south side of Highway 40 were flooded, including a lumber company, a newspaper office, and a Casey's General Store. Flooding also occurred on Highway 5 near the Glasgow Bridge.
Saline County									Flooding occurred in the Glasgow Bottoms and inundated 12 homes. Highway 240 was flooded from the intersection of Route PP to the Glasgow Bridge.
St. Charles County									In St. Charles County, the Mississippi River flowed through already broken levees and moved across St. Charles County to meet the Missouri River , about 10 miles upstream from where they normally meet. The Missouri River also rose, flooding Highways 94 and 67, and other roads in north and south St. Charles County. Access into West Alton and Portage Des Sioux was once again severely limited. About 600 homes remained under water, many of them since April.
St. Louis County									In St. Louis County, the Missouri River threatened the devastated Chesterfield Valley with new flooding. This time though, a 1 mile long temporary rock levee built along Eatherton Road held back the rising water. The following is flood information from other area rivers.
Cuivre River									The Cuivre River, which forms the border between St. Charles and Lincoln Counties also rose due to backwater from the Mississippi River. About 20 families, who had just moved back into their homes, were forced to evacuate.
Meramec River									The lower Meramec River suffered significant flooding because the bulk of the rain that triggered this round of flooding fell in the Meramec basin. The Meramec exceeded flood stage at Steelville, Sullivan, Pacific, Eureka, Valley Park and Arnold (where it had been in flood since June). The town of Valley Park, in St. Louis County , suffered the most as the Meramec rose 16 feet over flood stage. About 1500 people were evacuated as 275 homes were either flooded or surrounded by flood water. At least 200 businesses were flooded, including the Police and Fire Departments. This flooding brought back memories of 1982, when the current ghost town of Times Beach was flooded by the Meramec. After the 1982 flood, dioxin was found in the dirt in Times Beach prompting the buy out of the entire town. The contaminated dirt has been removed and will be destroyed at an incinerator being built at the site of the old town. Fortunately, the dirt was stored on ground high enough to escape the recent flooding. Further tests will be conducted to see if the recent flooding has brought any more dioxin contaminated dirt to the area.
Big River									Like the Meramec, the Big River also suffered major flooding rising an estimated 15 feet over flood stage. During the early morning hours of Friday (9-24-93) about 200 people were evacuated in Jefferson County from the communities of Cedar Hill and Morse Hill. 83 people had to be rescued from the Morse Hill area around 300 am on Friday. Numerous club houses on the upper big, from Cedar Hill to its confluence with the Meramec River, were destroyed. Schools were closed in
MISSOURI Cont'd - September 1993									Jefferson County on Friday due to numerous road closures throughout the county.

Storm Data and Unusual Weather Phenomena

August 1994									
Location	Date	Time	Path	Path	Number of		Estimated		
		Local/ Standard			Killed	Injured			
			Length (Miles)	Width (Yards)			Damage Property	Crops	Character of Storm

Gasconade River

In **Laclede County**, the Gasconade River flooded forcing the closing of Interstate 44 about 13 miles east of Lebanon. A Missouri Highway Patrol veteran of many years commented he had never seen that happen before. In **Osage County**, the river flooded Route E and Highway 89 and damaged several riverside cabins. (M80V)